

GRAIN & FEED JOURNALS

CONSOLIDATED

Vol. LXXVIII. No. 2

Chicago, Ill., U. S. A., January 27, 1937

Price \$2.00 Per Year. 25 Cents Per Copy.

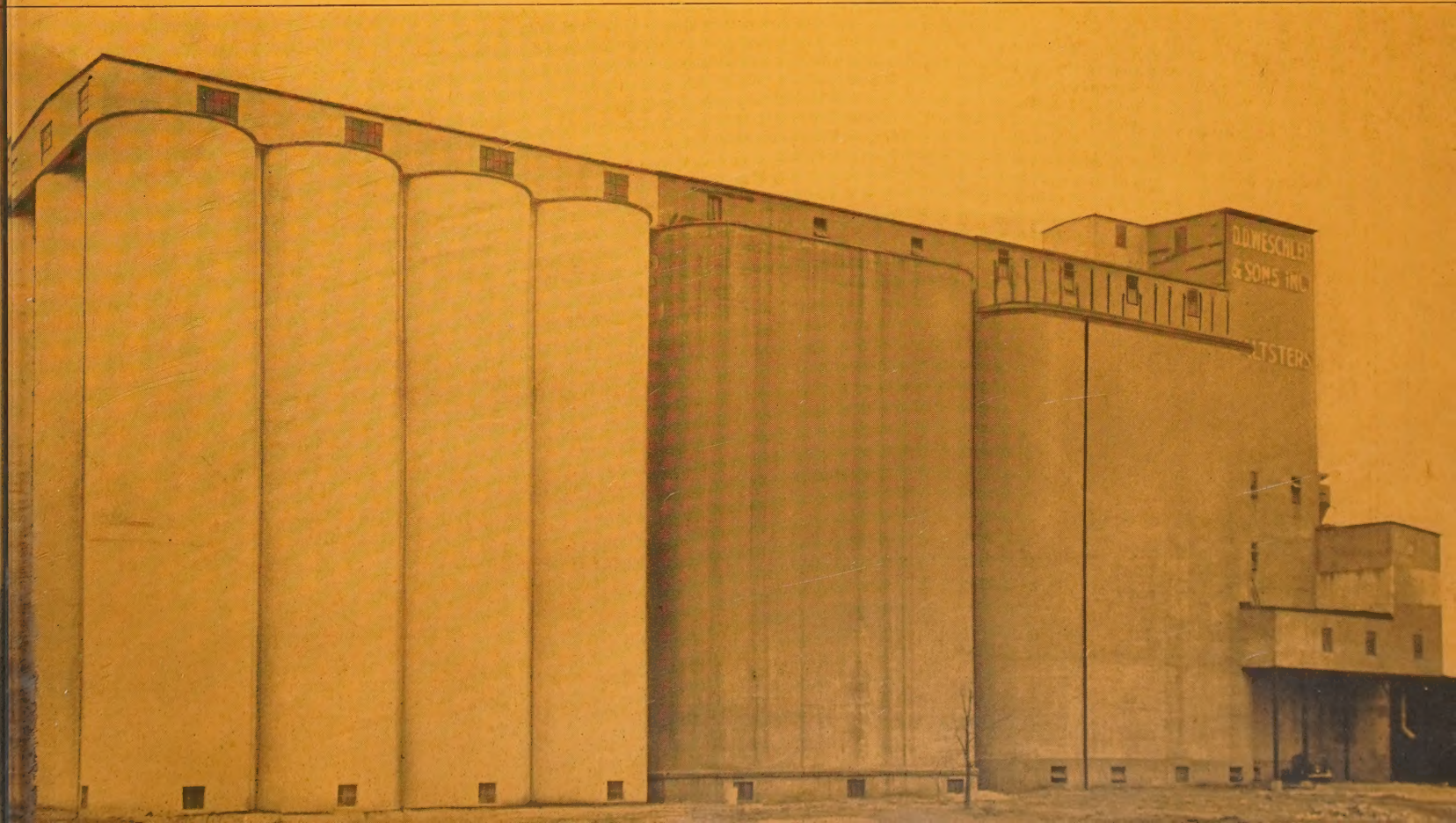
A Merger of Grain Dealers Journal, American Elevator & Grain Trade, Grain World and Price Current-Grain Reporter

In This Number

Improved Elevators Will Handle the 1937 Crop
Charter Not Modified by Flag of Steamship
Incentives to Speculative Action
Public Notice of Sale on Delivery
How to Lose 12 Months' Profit in 3
Increasing the Capacity of Your Legs
Would Disrupt Farmers National
The Peddler Trucker Problem
Meeting of Farm Seed Group

Record Attendance at Indiana Convention
Preventing Pressure Tank Explosions
Imported Seed Mixtures Violate Law
Seedsmen and Patman Act
Injured Seed Reduces Yield
Variety Test of Legumes
Vitamin A Required by Chicks
Feeding Minerals to Livestock
Turkey Feed Formulas

The Enlarged Concrete Elevator of the D. D. Weschler & Sons, Inc., at Milwaukee, Wis.
[For description see page 67]



Directory of the Grain Trade

In Organized Markets Only Members of the Local Grain Exchange Will Be Listed

HAVING YOUR name in this directory will introduce you to many old and new firms during the year, whom you do not know or could not meet in any other way. Many new concerns are looking for connections, seeking an outlet or an inlet, possibly in your territory. It is certain that they turn to this recognized Directory, and act upon the suggestions it gives them. The cost is only \$10 per year.

AMARILLO, TEXAS

Grain Exchange Members

J. N. Beasley Elevator Co., Inc., grain and seeds.*
Burrus Panhandle Elevators, public storage-mdsing.
Great West Mill & Elevator Co., millers, grain dealers.
Henneman Grain & Seed Co., seeds and grain.*
Kearns Grain & Seed Co., grain-field seeds.*
Stone, Lester, grain merchant.

BALTIMORE, MD.

Chamber of Commerce Members

Beer & Co., Inc., E. H., grain, bay, seeds.*

BUFFALO, N. Y.

Corn Exchange Members

American Elvtr. & Grain Div., recvs., shprs., consnts.*
Cargill, Incorporated, grain merchants.
McConnell, E. E., consignments, brokerage.*
Lewis Grain Corporation, consignments.*
McKillen, Inc., J. G., consignments.
Provoost, S. E., grain and feed broker.*
Wood Grain Corp., consignments, brokerage.*

BURLINGTON, IOWA.

Member Chicago Board of Trade

Bartlett-Frazier Co., grain merchants.*

CAIRO, ILL.

Board of Trade Members

Thistlewood & Co., grain and hay.*

CEDAR RAPIDS, IOWA

Federal-North Iowa Grain Co., country run grain.*
Piper Grain & Mfg. Co., receivers and shippers.
Wilder Grain Co., grain merchants.*

CHICAGO, ILL.

Board of Trade Members

Bailey & Co., E. W., grain commission merchants.*
Bennett & Co., Jas. E., grain, provisions, stocks.*
Bartlett-Frazier Co., grain merchants.*
Dole & Co., J. H., recvrs.-comm. mchts.*
Harris, Burrows & Hicks, grain & prov., futures.*
Holt & Co., Lowell, commission, grain and seeds.
Hulburd, Warren & Chandler, grain commission mchts.*
Lamson Bros. & Co., grain, stocks, provisions.*
Norris Grain Co., grain merchants.*
Quaker Oats Co., grain merchants.
Stratton Grain Co., grain merchants.*

CLEVELAND, OHIO

Bailey, E. I., shpr. grain, mill'd. oil and c.s. meal.*
The Cleveland Grain Co., home office.*

COLUMBUS, OHIO

Cummings & McAlister, brokers grain, feed, oil.
Dill Grain Co., L. J., shippers grain-feed.
Maney, M. R., grain and feed broker.

CINCINNATI, OHIO

The Early & Daniel Co., grain and feed service.*

DALLAS, TEXAS

Crouch Grain Co., J. C., buyers wheat, corn, oats.*

DECATUR, ILL.

Baldwin Elevator Co., grain merchants.*
Evans Elevator Co., grain, Chicago B. of T. Members.*
Hight Elevator Co., grain merchants.*

DENVER, COLO.

Grain Exchange Members

Ady & Crowe Merc. Co., The, recvrs., shprs., consignments.*
Houlton Grain Co., grain merchants.*
Intermountain Elevator Co., recvrs., shprs., consignments.*

ENID, OKLA.

Board of Trade Members

Fenquay Grain Co., optrs., country elvtrs., gr. mdsng.*
General Grain Co., term. elvtr., gr. merchants.*
Johnston, W. B., wheat, coarse grains, field seeds.*
Salina Terminal Elvtr., optrs., Southwest Term. Elvtr.

*Members Grain & Feed Dealers National Assn.

FORT DODGE, IOWA

Bulpitt Grain Co., grain merchants.*
Davis Bros. & Potter, grain shippers.*

FORT WORTH, TEXAS

Grain and Cotton Exchange Members

Bennett & Co., Jas. E., grain, stocks, provisions.
Brackett Grain Co., brokerage, consignments.*
Carter Grain Co., C. M., brokerage and consignments.*
Pt. Worth Elvtr. & Whsg. Co., consignments, stge.
Lone Star Elevators, public storage-merchandising.
Rogers Co., E. M., brokerage and consignments.*
Smith-Ingraham Grain Co., domestic-export grain.
Strader, Ralph, brokerage, consgmts., merchants.*
Transit Gr. & Comm. Co., consignments-brokerage.*

GALVESTON, TEXAS

Shaw, Thomas F., grain exporter.*

GREENVILLE, OHIO

Hall Grain Co., The, wholesale grain.

HUTCHINSON, KAN.

Farmers Co-Operative Comm. Co., grain storage.
Smoot Grain Co., oper. Grain Belt Elevator.*

INDIANAPOLIS, IND.

Board of Trade Members

Cleveland Grain Co., grain commission.*

KANSAS CITY, MO.

Board of Trade Members

Davis-Noland-Merrill Grain Co., grain mchts.*
The Kansas Elevator Co., mlg. wheat, corn, oats, barley.*
Meservey-O'Sullivan Grain Co., gr. mchts., congnts.*
Moore-Seaver Grain Co., grain receivers.*
Mid-Continent Grain Co., grain merchants-consignments.*
Scouler-Bishop Grain Co., consignments.*
Vanderslice-Lynds Co., Kafir, milo, consignments.*
Wolcott & Lincoln, Inc., consignments.*

LOUISVILLE, KY.

Board of Trade Members

Zorn & Co., S., receivers and shippers.*

MARYSVILLE, OHIO

Scott & Sons, O. M., soy beans.

MEMPHIS, TENN.

Merchants Exchange Members

Buxton, E. E., broker and commission merchant.*

MILWAUKEE, WIS.

Grain & Stock Exchange

Stratton Grain Co., grain merchants.*

MINNEAPOLIS, MINN.

Chamber of Commerce Members

Bunge Elevator Corp., grain merchants.
Cargill, Incorporated, milling wheat.*
Hallet & Carey Co., grain merchants.
Hiawatha Grain Co., screenings.*
McGuire Company, Arthur, shprs., b/wheat, m/wht.*
Scroggins Grain Co., grain merchants.*

NEW YORK, N. Y.

Produce Exchange Members

Stratton Grain Co., grain merchants.*

OMAHA, NEBR.

Grain Exchange Members

Bartlett-Frazier Co., grain merchants.*
Bell-Trimble Co., recvrs. and shippers.*
Udlike Grain Corp., receivers & shippers.*

PAXTON, ILL.

Watson Grain Co., corn & oats brokers.*

PEORIA, ILL.

Board of Trade Members

Bowen Grain Co., H. D., grain commission.*
Cole Grain Co., Geo. W., receivers and shippers.
Dewey & Sons, W. W., grain commission.*
Feltman Grain Co., C. H., grain commission.
Luke Grain Co., grain commission.*
Miles, P. B. & C. O., grain commission.*

PHILADELPHIA, PA.

Commercial Exchange Members

Markley, P. R., grain broker.*

PITTSBURGH, PA.

Members Grain and Hay Exchange

Rogers & Co., Geo. E., receivers, shippers.*

PONTIAC, ILL.

Balbach, Paul A., grain buyers, all markets.

ST. JOSEPH, MO.

Grain Exchange Members

Archer-Daniels-Midland Co., grain merchants.*
Bartlett-Frazier Co., grain merchants.*
Dannen Grain & Mfg. Co., grain mchts.-consignments.
Stratton Grain Co., grain merchants.*

ST. LOUIS, MO.

Merchants Exchange Members

Anheuser-Busch, Inc., feed grains.*
Ballard-Messmore Grain Co., consignments-futures.*
Fuller-Woolbridge Com. Co., gr. & millets all kinds.*
Langenberg Bros. Grain Co., grain commission.*
Morton & Co., grain commission.*
Mullally-Evans Co., everything in grain.*
Nauon Commission Co., grain commission.*
Schwarz Grain Co., grain dealers, consignments.*

SALINA, KANS.

Eberhardt-Simpson Grain Co., general mchts.*
Smoot Grain Co., oper. Salina Terminal Elevator.*

SAN ANTONIO, TEXAS

King Co., Douglass W., sorghums, corn, s/corn, cane sd.*

SIDNEY, OHIO

Custenborder & Co., E. T., grain shippers.*
Wells Co., The J. E., wholesale grain.

SIOUX CITY, IOWA

Grain Exchange Members

Flanley Grain Co., also office at Omaha, Neb.*
Terminal Grain Corporation, grain merchants.*

TOLEDO, OHIO

Southworth & Co., E. L., consignments, futures.

TOPEKA, KANSAS

Derby Grain Co., gen'l grain merchants.*

VERNON, TEXAS

Martin-Lane Grain Co., wholesale grain.*

WELLINGTON, KANS.

Wolcott & Lincoln, Inc., optrs., Wellington Term. Elvtr.

WICHITA, KANS.

Board of Trade Members

Adair-Morton Grain Co., wheat, corn, oats, barley.*
Craig Grain Co., wheat specialists, consignments.
Harold-Wallis Grain Co., milling wheat specialists.
Smith-McLinden Grain Co., wheat, corn, grains, feeds.
Wallingford Grain Corp., Sam P., grain and storage.
Wichita Terminal Elvtr. Co., gen'l elvtr. business.*

WINCHESTER, IND.

Goodrich Bros. Co., wholesale grain and seeds.*

Grain & Feed Journals Consolidated, a merger of Grain Dealers Journal (Est. 1898), American Elevator & Grain Trade (Est. 1882), Grain World (Est. 1928), and Price-Current-Grain Reporter (Est. 1844). Published on the 2nd and 4th Wednesday of each month in the interest of progressive wholesalers in grain, feed, and field seed. 332 South La Salle Street, Chicago, Illinois, U. S. A. Price \$2.00 per year, 25c per copy. Entered as second class matter November 27, 1930, at the postoffice at Chicago, Ill., under the act of March 3, 1879. Vol. LXXVIII, No. 2, January 27, 1937.

Use Universal Grain Code and Reduce Your Telegraph Tolls

Corn Exchange
Members

BUFFALO

Corn Exchange
Members

Wood Grain Corp.
CONSIGNMENTS—BROKERAGE
BUFFALO, N. Y.

American Elevator & Grain Division

Russell Miller Milling Company
RECEIVERS, SHIPPERS AND ELEVATOR OPERATORS
CONSIGNMENTS SOLICITED

Our System of Terminal Elevators, enables us to give prompt service and reliable quality on coarse grains, durums and protein milling wheats.

E. E. McCONNELL
Consignments — Brokerage
BUFFALO, N. Y.

Lewis Grain Corp.
A good firm to consign to
Corn—Oats—Soft Wheat—Barley
BUFFALO NEW YORK

J. G. McKILLEN, INC.
RECEIVERS
Consignments a Specialty
BUFFALO NEW YORK

Chamber of Commerce
Members

MINNEAPOLIS

Chamber of Commerce
Members

COAST TO COAST GRAIN SERVICE

CARGILL

INCORPORATED
Headquarters MINNEAPOLIS, MINN.
761 Chamber of Commerce

Country Offices
Fairmont, Minn.
Marshall, Minn.
Williston, No. Dak.
Crystal, No. Dak.
Sioux Falls, So. Dak.
Lincoln, Neb.

Terminal Offices
Duluth, Milwaukee, Chicago, Green Bay, Cedar Rapids,
Toledo, Buffalo, Albany, New York, Boston, Omaha,
Memphis, Kansas City, St. Louis, Portland, Spokane,
Seattle, San Francisco, Winnipeg, Man.; Montreal, Que.

Cargill, Incorporated, Seed Division, Box 64, Minneapolis

HALLET & CAREY CO.

Grain Merchants

Minneapolis Duluth Winnipeg

When writing advertisers mention Grain & Feed Journals Consolidated. By so doing you help both yourself and the publication.

CIPHER CODES

We carry the following cipher codes in stock:
Universal Grain Code, board cover...\$1.00
Robinsons Cifer Code, leather..... 2.50
Dowling's Grain Code..... 3.00
Miller's Code (1917), cloth..... 2.00
Cross Telegraphic Cipher (10th edition) 4.00
Peerless Export Grain Code.....85.00
A. B. C. Code, 5th Ed., with sup.....20.00
Baltimore, Export Cable Code.....15.00
Bentley's Complete Phrase Code.....10.00
Riverside Flour, Improved (6th Ed.)..12.50
Calpack Code (1923).....10.00

All prices are f. o. b. Chicago

GRAIN & FEED JOURNALS

Consolidated

332 S. La Salle St. Chicago, Ill.

WHEAT

AND ALL OTHER GRAINS

Any Grade—Any Quantity—Any Time

BUNGE ELEVATOR CORPORATION
MINNEAPOLIS, MINN.

Grain Exchange
Members

DENVER

Grain Exchange
Members

THE ADY & CROWE MERCANTILE CO.

Denver, Colorado

Receivers and Shippers — Grain and Beans
Consignments Solicited

THE HOULTON GRAIN CO.

Grain Merchants

DENVER, COLORADO

Upon readers patronage of its advertisers depends the success of Grain & Feed Journals Consolidated. Mention it. Thank you.

Intermountain Elevator Company

and FORT MORGAN MILLS, INC. DENVER, COLORADO
Receivers, Shippers, and Elevator Operators

CONSIGNMENTS SOLICITED

Ample storage, constant stocks, and country connections enable us to give prompt, efficient service, and dependable quality on coarse grains, and protein milling wheats.

Board of Trade
Members**CHICAGO**Board of Trade
Members**LAMSON BROS. & CO.**

2200 Board of Trade

Established 1874

Chicago, Ill.

*"63 years of continuous service in the grain trade."*GRAIN - STOCKS
BONDS - COTTON
BUTTER - EGGS
PROVISIONS**E. W. BAILEY & CO.****COMMISSION MERCHANTS**

GRAIN, SEEDS AND PROVISIONS

1142-44 Board of Trade, CHICAGO

JAMES E. BENNETT & CO.

— ESTABLISHED 1880 —

ASK FOR BIDS
WHEAT—CORN—BARLEY
RYE—OATS—SOY BEANS

GRAIN COMMISSION MERCHANTS AND STOCK BROKERS—332 So. La Salle St., CHICAGO

MEMBERS ALL PRINCIPAL COMMODITY AND SECURITY EXCHANGES**CONSIGNMENTS AND FUTURES ORDERS SOLICITED IN ALL PRINCIPAL MARKETS**

MINNEAPOLIS	ST. LOUIS	PEORIA	CAIRO	INDIANAPOLIS	KANSAS CITY
Chamber of Commerce	Merchants Exchange	Board of Trade	Board of Trade	Board of Trade	Board of Trade

THE QUAKER OATS COMPANY

BUYERS OF

Oats Corn Wheat BarleyCedar Rapids,
Ia.Ft. Dodge,
Ia.Akron,
OhioSt. Joseph,
Mo.

CHICAGO, ILLINOIS

**Harris, Burrows
& Hicks**Siebel C. Harris
Mgr. Grain Department*We Specialize in*
Hedging and
Spreading Operations

Members Principal Exchanges

135 So. La Salle St.
Chicago

Minneapolis

St. Paul

BARTLETT FRAZIER CO.**GRAIN MERCHANTS**

Receivers—Buyers—Shippers—Exporters

111 W. JACKSON ST., CHICAGO

HULBURD, WARREN & CHANDLER

GRAIN COMMISSION MERCHANTS

208 South La Salle Street, Chicago

Arthur J. Pollak, Mgr., Cash Grain Dept.

Phone State 9760

Consignments Solicited—Bids "To-Arrive"
Ask for our Shipping Prices

Say you saw it in the

JournalWhen you write our advertisers
Thanks*Ship Your Grain or Seeds and Send Your Orders to***J. H. DOLE & COMPANY**

RECEIVERS and COMMISSION MERCHANTS

CHICAGO

PEORIA

ST. LOUIS

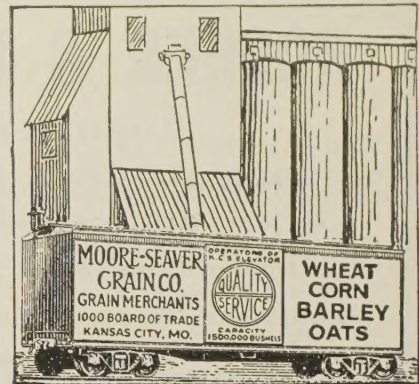
**Use Universal Grain Code
and Reduce Your Telegraph Tolls**

Board of Trade
Members**KANSAS CITY**Board of Trade
Members**WOLCOTT & LINCOLN**Incorporated
Operating Alton Elevator
CONSIGNMENTS

Future orders executed in all markets.

801-810 Bd. of Trade, Kansas City
Hutchinson, Kans. Salina, Kans.
Wichita, Kans. Dodge City, Kans.
Marysville, Kans. Wellington, Kans.
Enid, Okla.**WANT ADS**

in the GRAIN & FEED JOURNALS Consolidated make wants known to everyone connected with the grain trade. If you desire to buy or rent, sell or lease an elevator or anything used by grain dealers, try a want ad twice a month and your want will soon be satisfied.

**RECEIVERS, SHIPPERS AND BROKERS**

RECEIVERS **GRAIN** SHIPPERS
• W. W. **DEWEY** & SONS •
CONSIGN TO DEWEY
PEORIA

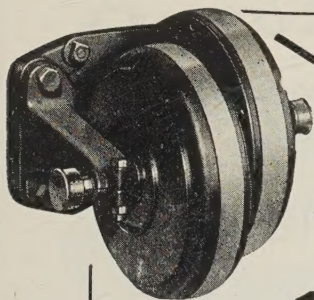
LANGENBERG BROS. GRAIN COMPANY
Established 1877
ST. LOUIS NEW ORLEANS

E. H. BEER & CO., INC.
Successors to
Chas. England & Co., Inc.
GRAIN—HAY—SEEDS
Commission Merchants
308-310 Chamber of Commerce, Baltimore

Geo. E. Rogers & Co.
WABASH BUILDING, PITTSBURGH, PA.
RECEIVERS—SHIPPERS
GRAIN—HAY—MILLFEED—FLOUR

There is no better time to advertise than the present. Better start before your competitor. Write the JOURNAL today.

Nanson Commission Co.
Grain—Hay—Seeds
202 Merchants Exchange Bldg.
ST. LOUIS, MO.



3000 in use

15 to 25%

and—
it's
frictionless

greater
screen
capacity

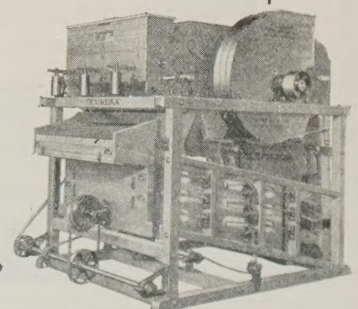
“SUPER EUREKA AGITATION”

puts “magic”
in every screen

a finer definition—a trueness and unchanging uniformity in screening far superior to all “eccentric” cleaning—and far less wasteful.

and being frictionless means wearless—which eliminates all operative troubles completely and erases upkeep cost. Power to drive is cut in half. Capacity increases 15% to 25%—the increase in screening intensity expands quantity handled that much. Our catalog and names of nearby users will prove interesting.

3000 proven
in 6 years



S. HOWES CO., Silver Creek, N. Y.

“EUREKA”
Cleaner

GRAIN ELEVATOR BUILDERS

HORNER & WYATT *Engineers*

Designers of Grain Elevators
and Feed Mills

Power Problems a Specialty

470 BOARD OF TRADE KANSAS CITY, MO.

Z E L E N Y Thermometer System

Protects Your Grain

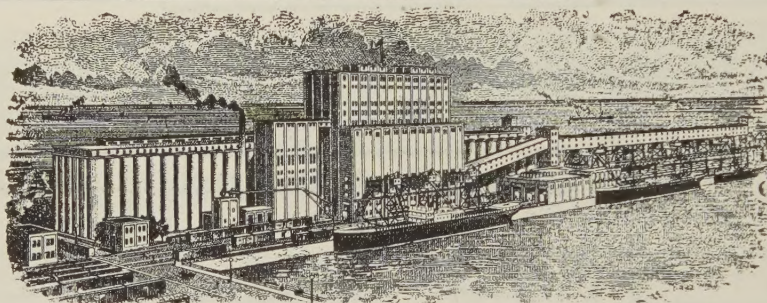
Estimates cheerfully given.
Write us for catalog No. 6.

Zeleny Thermometer Co.

542 S. DEARBORN ST.

CHICAGO, ILL.

Capacity
5,000,000
Bushels



PENNSYLVANIA RAILROAD ELEVATOR AT BALTIMORE

JAMES STEWART CORPORATION

ENGINEERS AND CONTRACTORS

FISHER BUILDING—343 S. DEARBORN ST., CHICAGO, ILLINOIS

H. G. ONSTAD
PRES.-GEN MGR.
Phone Harrison 8884

*Equipped with
Four Stewart
Link-Belt
Grain Car
Unloaders*

L. V. HEUSER
VICE-PRES.



Santa Fe Elevator "A"

Kansas City, Kans.

Capacity
10,500,000 Bushels

JOHN S. METCALF CO.

Grain Elevator Engineers and Constructors

105 W. Adams St., Chicago

460 St. Helen St., Montreal

837 W. Hastings St., Vancouver, B. C.

12-15 Dartmouth Street, London, England

Jones - Hettelsater Construction Co.

Mutual Building — — Kansas City, Mo.

Designers and Builders

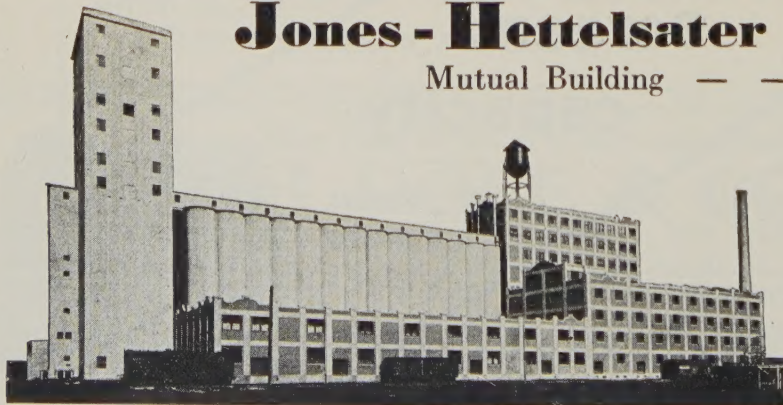
**Grain Elevators
Feed and Flour Mills**

Pillsbury Flour Mills Co.
Springfield, Ill.

1,000,000 bus. Elevator

8 Story Flour Mill — 4 Story Cereal Mill
2 Story Warehouse

*designed and constructed by us under a
single contract.*



GRAIN ELEVATOR BUILDERS

The Barnett & Record Company

DESIGNERS

Grain Elevators

MINNEAPOLIS, MINN.

Mill Buildings

BUILDERS

Industrial Plants

MACDONALD ENGINEERING CO.

Grain Elevators—1895 to Today

San Francisco

One North La Salle Street, Chicago

Toronto

WE SPECIALIZE

in Modernizing Country Elevators
Our recommendations will cost you nothing. When do you wish us to submit estimates on remodeling your grain-handling facilities?

THE VAN NESS CONSTRUCTION CO.
Grain Exchange Omaha, Neb.

HOGENSON

Construction Co.

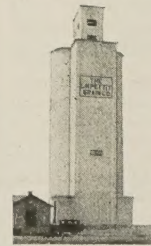
Designers and Builders

Elevators, Feed Mills, Warehouses

REMODELING

Corn Exchange Bldg. MINNEAPOLIS, MINN.

Concrete Costs No More



Let us prove it.
Plans and estimates
on your needs made
cheerfully.

CHALMERS & BORTON

Designers & Builders

28 E. 1ST ST. HUTCHINSON, KAN.

T.E. IBBERSON CO.

GRAIN ELEVATOR BUILDERS

Feed Mills Coal Plants
Repairing and Remodeling

MINNEAPOLIS MINNESOTA

WE REPAIR

Concrete Structures and Moisture

Proof by

GUNTEx METHOD

Cement Gun Construction Co.

537 S. Dearborn St. Chicago, Ill.

WE BUILD

GRAIN STORAGEES

29 Years' Experience

Send us your inquiries

POLK GENUNG POLK COMPANY

Fort Branch, Indiana

YOUR ELEVATOR

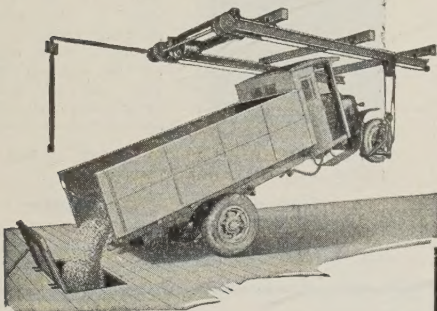
can be brought up-to-date for less than
it is costing you to operate it. Ask for
our recommendations and estimates on
modernizing your plant.

Reliance Construction Co.

Board of Trade Indianapolis, Ind.

McMillin Truck Dump

For Electrical Power



The above dump represents the outcome after years in the business of manufacturing of Truck Dumps. In the endeavor to make a dump which would fill the desires of hundreds of elevator owners, each having different ideas. This is why we can honestly say that we now have a dump that will satisfy 99% of unbiased grain elevator operators.

Consider its installation, cost, efficiency, handiness and speed.

Address

L. J. McMILLIN

525 Board of Trade Bldg.,
INDIANAPOLIS, INDIANA

A. Clemons Construction Co.

SOUTH SOLON, OHIO

Designers and Builders

Concrete Grain Elevators, Coal Pockets,
Feed Mills

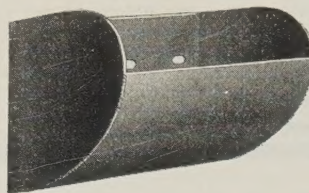
Speed Up Your Legs NOW!

with

CALUMET

Pat. U. S. & Foreign Countries

Elevator Cups



Get ready to handle the new crop economically and speedily. The capacity of your legs can be materially increased by installing CALUMET CUPS on your present belt. Very few, if any other changes, are necessary. Advise what equipment you have (width of belt, size of pulleys, power, etc.) and what capacity you want, and we will tell you just how CALUMET CUPS are the solution to your problem. No obligation.

B. I. WELLER

Sole

Manufacturer

704 Hoffman St., Hammond, Ind.
327 S. La Salle St., Chicago, Ill.

Wanted and For Sale

The rate for advertisements in this department is 25 cents per type line each insertion

ELEVATORS FOR SALE

NEBRASKA—Two elevators operating at a profit. George L. Bruner, Loretto, Nebraska.

WELLINGTON, KANS.—10,000 bu. iron clad elevator for sale; coal bins and sheds, on Rock Island; good farming section. Farmers Elevator Co., Wellington, Kans.

IOWA—Elevator on R. I. R. in small town; 7 acres level land; good six-room house; two barns, 40x32 and 24x32; double corn crib, overhead granary. All buildings in A-1 condition. Price \$6,000, \$3,000 will handle and would consider cheap property as part of \$3,000. Earl O. Greenlee, Guthrie Center, Iowa.

COLORADO—Elevator; bins for 40,000 bus. Equipped with steam roll and grinder; cleaning machinery for beans which includes machine to take rock or gravel out of beans. All machinery run with dust proof electric motors. Rail switch to plant, also track scales. Building 80x238 feet, concrete basement under 200 ft. Floor and basement storage for 60,000 bags of beans and potatoes, plenty of both raised here. Building brick; situated on main street, best business corner in town; on our own real estate 120-238-175. Coal bin and garage on this property. We handle IHC line of farm machinery, tractors and trucks. Also bean elvtr., frame building 50x75 on our own real estate 60x140 situated seven miles east at Gaeton. Property all clear, no incumbrance. This going prosperous business. In the heart of the best irrigated section in Colorado. Reason for selling, thinking of retiring. Write Northern Implement & Produce Co., Eaton, Colo.

DAVIS BROS. & POTTER DISSOLUTION SALE

GRAIN ELEVATORS & BUSINESS

To dissolve our Company we will sell all our properties, located, Smithshire, Toulon, Camp Grove, La Rose, Washburn, Ellis, and Collison, Illinois. Wieston, Manson, Sulphur Springs, Pioneer, Denhart, Iowa.

Total capacity, 1,000,000 bu. Average business for past 11½ years, 2,826,000 bu. per year. For full particulars, address—

DAVIS BROS. & POTTER

La Rose, Ill. — Peoria, Ill. — Ft. Dodge, Iowa

ELEVATORS FOR SALE

OKLAHOMA—Practically new elevator. Hammer mill and coal business in connection. Address 78B6, Grain & Feed Journals, Chicago.

MINNESOTA—125,000 bus. iron clad frame cleaning and transfer elevator for sale, electric power, fast handling, good cleaner equipment, Northwestern road, a good transit point, and in good barley territory. Real bargain price. Banner Grain Co., Minneapolis, Minn.

OKLAHOMA—Modern 25,000 bu. frame elevator with private switch and 2½ acres land, in heart of major wheat county; close to thriving city; good schools; modern living conditions; large wheat shipping business and retail sidelines, including custom grinding, feeds, seeds, coal, gasoline, oil; increased acreage and best wheat prospects in 5 years; will net energetic owner \$10,000 annually. Present owner must retire account of health. Address 78B3, Grain & Feed Journals, Chicago, Ill.

ELEVATORS WANTED

WANTED—Grain elevator, coal and feed business in Indiana, Michigan or Ohio. Address 78B1, Grain & Feed Journals, Chicago.

SITUATION WANTED

EXPERIENCED MANAGER wants position; successful record; references. Address 78A9, Grain & Feed Journals, Chicago, Ill.

MANAGER with 14 years' experience grain and lumber, wants position with company requiring real ability. Write Box 21, Allerton, Ill.

POSITION WANTED as manager of country grain station; 15 years experience grain and all sidelines; can make change at once. Address 78A4, Grain & Feed Journals, Chicago, Ill.

COMPETENT elvtr. mgr.; 20 years experience, wants change location; handle side lines; can produce results; reference A-1. Prefer Iowa or adjoining states. For details or personal interview write 78A2, Grain & Feed Journals, Chicago.

POSITION WANTED as manager of grain elevator; 10 years' experience in grain business, 5 years as manager; now employed as manager, but have good reasons for wanting to make a change; 29 yrs. of age; can give good references. Write, 76Z1, Grain & Feed Journals, Chicago, Ill.

BUSINESS OPPORTUNITIES

ELEVATOR AND FEED PLANT FOR SALE
Cleveland, Ohio, on NYC R. R., modern concrete house; complete mixing and grinding equipment; a bargain.
Grain Storage, Inc.
2520 Market Avenue Cleveland, Ohio

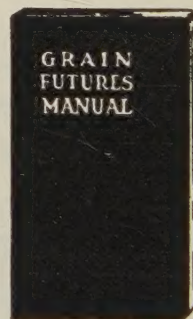
HELP WANTED

WANTED—Salesmen to handle best line of farm salt to elevators and stores on commission basis. For particulars, write Box 328, Saginaw, Mich.

SAMPLE ENVELOPES

SAMPLE ENVELOPES—SPEAR SAFETY—for mailing samples of grain, feed and seed. Made of heavy kraft paper, strong and durable; size 4½x7 inches. Have limited supply to sell at \$2.35 per hundred, or 500, \$10.00 plus postage. Sample mailed on request. Grain & Feed Journals, 332 S. La Salle St., Chicago, Ill.

Grain Futures Manual



is a clear and concise exposition of the elements surrounding trading in grain futures. It contains questions pertinent to such trades and answers thereto, which are illuminating though brief; also a bibliography, making possible the reader's easy digest of the subject with the aid of ample references to many authoritative works.

Bound in keratol, size 3½x6 inches, 74 pages, price 50c, plus postage.

Grain & Feed Journals Consolidated

332 S. La Salle St. Chicago, Ill

KEEP POSTED

GRAIN & FEED JOURNALS CONSOLIDATED

332 So. La Salle St., Chicago

A merger of Grain Dealers Journal, American Elevator & Grain Trade, Grain World and Price Current-Grain Reporter.

Gentlemen:—In order to keep us posted regarding what is going on in the grain and feed trades outside our office, please send us the *Grain & Feed Journals* twice each month. Enclosed find Two Dollars for one year.

Name of Firm

Capacity of Elevator

Post Office

State

Your RADIO MARKET Record

A boon to the grain dealer who keeps a convenient, permanent record of market quotations for ready reference.

This form provides convenient spaces for hourly quotations on Wheat, Corn, Oats, Rye, and Barley. A week on a sheet, and a year's supply of sheets in a book.

Order Form CND 97-5.

Price, \$1, plus postage. Shipping Weight, 1 lb.

Grain & Feed Journals Consolidated

332 S. La Salle St. Chicago, Ill.

MACHINES FOR SALE

BROWN-DUVAL, two compartment moisture tester for sale. W. W. Pearson, Reynolds, Ind.

CORN CUTTER & Grader—has motor—used very little. 76D6 Grain & Feed Jnls., Chicago.

HAMMER MILL with 25-h.p. motor and all attachments. Priced to sell. Write 76D7 Grain & Feed Journals, Chicago, Ill.

FEED MIXER for sale, has motor, and a late machine. Need space. Will sacrifice. Write 76D5 Grain & Feed Journals, Chicago, Ill.

FEED MIXER—one ton—floor level feed—has motor—good as new. Write 76D8 Grain & Feed Journals, Chicago, Ill.

FOR SALE—24" D. H. Mill; equipped with two 20 h.p. motors; priced reasonable. Steward Grain and Lumber Co., Steward, Illinois.

CORN SHELLERS; 15 hp motor; 10 hp type Z Fairbanks engine; 5"x10" bucket elevator; 4 bu. automatic scale; 500 bu. hopper scale. Truck dump. P. O. Box 212, Reynolds, Ind.

FOR SALE—Second hand feed and elevator machinery; Tag-Heppenstall Moisture Meters; Bolinder Diesel Engines. Weaver Sales Corp., Corn Exchange, Minneapolis, Minn.

MACHINERY FOR SALE

Used 16" Papec Mill with fan
Used No. 3 Rowell Mill with fan
Used No. 3 Jay-Bee Mill with fan
Several used Blue Streak Hammer Mills.
Davis corn cutters; horizontal mixers; Rotary knife cutters, all sizes. Used 26" Bauer DR Attrition Mill with motors. Used Richardson Automatic Grain scales. Complete line of Feed Mill and Elevator Equipment. J. C. Kintz, Mill Machinery, 234 S. 16th St., Quincy, Ill.

FOR SALE

30 hp Papec Mill complete with motor
No. 4 Monitor Receiving Separator
No. 122 Standard Seed Cleaner
50 hp Type Y, F-M Engine
26" Bauer Attrition mill with 2, 25 hp motors
½ ton Vertical Feed Mixer
½ ton Horizontal Feed Mixer
Send for complete list of rebuilt machinery.
Sidney Grain Machinery Co.
Sidney, Ohio

MACHINERY BARGAINS

S & W Verticle feed mixer; Gruendler horizontal mixer; Dial Scales; Hopper Scales; 6 bu. Fairbanks Automatic Scale; ½ bu. Richardson Scale; magnetic pulley; 2 and 3 pair high feed rolls; corn cutter and grader; corn cracker and grader; No. 9 Clipper Cleaner; Invincible and Eureka Cleaners; 60 bbl. Midget Mill; 2 cubing machines; 24-40 Gruendler Hammer Mill with 150 h.p. motor; 16-40 Hammer Mill with 100 h.p. motor; No. 30 Blue Streak Mill with 30 h.p. motor; 24" Robinson Mill with 2 20 h.p. motors; belt driven attrition mills all sizes and makes. Corn Shellors; pulleys, a few large sizes. Everything for the feed mill or elevator. An engineer at your service. A. D. Hughes Co., Wayland, Mich.

MOTORS—GENERATORS**SAVE on MOTORS and GENERATORS**

Write for new Free Catalog of guaranteed rebuilt Motors, Generators, Pumps, Compressors, etc. We Save you Half. Your Idle equipment taken in trade. Specials in totally enclosed motors, as well as other Bargains.
Chicago Electric Co., 1331 W. 22d St., Chicago.

ELECTRICAL MACHINERY

Large stock of motors and generators, A.C. and D.C., new and rebuilt, at attractive prices. Special bargains in hammermill motors, 25 to 100 H.P., 1200 to 3600 R.P.M. Write for stock list and prices. Expert repair service.
V. M. NUSSBAUM & CO., Fort Wayne, Indiana.

ENGINES FOR SALE**DIESEL FOR SALE**

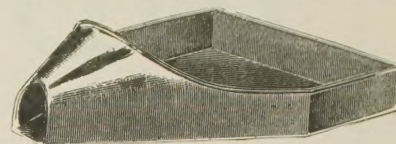
Number of F-M 25 h.p. new.
2 160 h.p. Atlas Imperial, new.
Other makes and sizes, new and used, prices to sell; terms when needed.
American Power Equipment Co.
Woolworth Bldg., Oil City, Pa.

SEEDS FOR SALE

SEED OATS that grow and win favor with those who plant them. Rice Grain Co., Metamora, Ohio.

RAT EXTERMINATOR

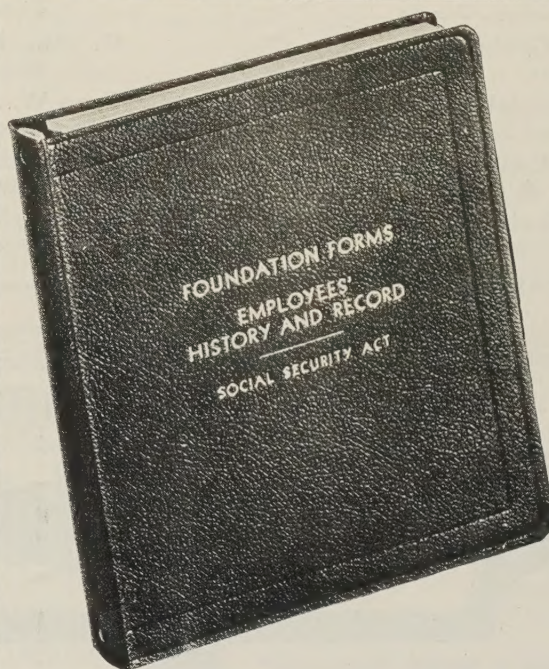
RAT LUNCHES—Kills rats and mice without poison. Ready to use. Just lay them out. Endorsed by agricultural authorities. \$1 large package—\$3.50 a carton prepaid. Salesmen-Distributors wanted. Rat Lunches Co., Carroll, Ia.

SAMPLE PANS

Formed by bending sheet aluminum, reinforced around top edge with copper wire. Strong, light, durable. The dull, non-reflecting surface of aluminum will not rust or tarnish; assists users to judge of the color and to detect impurities.

Grain Size, 2½"x12"x16½", \$2.00; Seed Size, 1½"x9"x11", \$1.65, at Chicago.

GRAIN & FEED JOURNALS
Consolidated
332 So. La Salle St., Chicago, Ill.



You Must Do It

Effective Jan. 1, 1937, in conformity with the Federal Social Security Act, it became obligatory on your part to keep a complete record, make out returns and pay taxes on your payroll if you employ one or more persons. You also must act as government collecting agent, withholding the tax due from your employees.

This new procedure will not be a burden if you use the Foundation Payroll Record System—Employees' History and Record—which provides spaces for all essential information required by the law. These forms may be used as a complete employee record, with the assurance that all the record requirements of the Social Security Act and any state compensation act will be met. The forms are designed for use with the customary payroll forms.

This system, a combination of two forms, contains enough forms for one to 25 employees; 25 yellow sheets for employer's permanent record and 25 white sheets with the same ruling for the employee. On the back of the white sheet is a termination report, to be filled in and the sheet given the employee when he leaves employer. Special Minimizing Tax Bulletin, a part of this service to all buyers of the Pay Roll Record System, will be included. Heavy ledger paper; durable 3-ring binder, price \$4.00, plus postage. Order Form EREE-101.

Grain & Feed Journals Consolidated

332 S. La Salle St.

Chicago, Illinois

INDIANAPOLIS

Stands Out Ahead

Located in the heart of the Corn Belt and having the best railroad and handling facilities, Indianapolis affords you an excellent outlet for your grain. Active buyers assure a constant market.

Ship us your wheat, corn, and oats.

Acme-Evans Co.
Millers

James E. Bennett & Co.
Grain, Provisions, Stocks

The Cleveland Grain Co.
Consignments

The Early & Daniel Co.
Receivers and Shippers

Hayward-Rich Grain Corp.
Commission & Brokerage

The Low Hill Grain Co.
Commission and Brokerage

Lowell Hoit & Co.
Grain Commission

McEwan-Butturff Grain Co.
Consignments

C. Wm. Maibucher Grain Co.
Receivers and Shippers

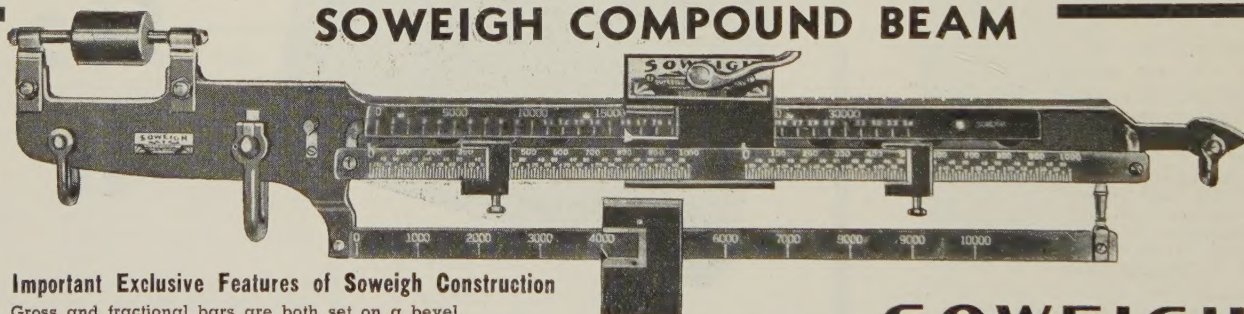
Fred W. Scholl Grain Co., Inc.
Receivers and Shippers

Standard Elevator Co.
Receivers and Shippers

Steinhart Grain Co.
Receivers and Shippers

Indianapolis Public Elevator Corp. Grain Storage and Drying

SOWEIGH COMPOUND BEAM



Important Exclusive Features of Soweigh Construction

- 1 Gross and fractional bars are both set on a bevel.
- 2 Gross and tare bars, graduated in 1000-lb. notches.
- 3 Both fractional poises placed on one bar, using full length of bar for fractional weighing and permitting wider spread, easier reading graduation.
- 4 Positive reading poise on all three bars. No shadows to obstruct reading—all preceding figures showing.

Get the Facts on
SOWEIGH before you
buy ANY scale

SOWEIGH SCALES

SUPERIOR SCALE COMPANY

DELAVAN, ILLINOIS

CONFIRMATION BLANKS

Simple—Complete—Safe

To avoid trade disputes, and differences and prevent expensive errors, use triplicating confirmation blanks. You retain tissue copy, sign original and duplicate and send to customer. He signs and returns one.

This places the entire burden for any misunderstanding of your intentions upon the other party and protects you against expensive misinterpretation of your trades.

Use of these confirmations makes for safer business and surer profits. Spaces provided for recording all essential conditions of each trade.

Fifty confirmations in triplicate, bound with pressboard and wire stitched, size 5 1/2 x 8".

Order form No. 6 CB. Price 75c at Chicago.

Three Copies to One Address \$2.00 plus postage

GRAIN & FEED JOURNALS

Consolidated

332 So. La Salle Street

CHICAGO

Record of Cars Shipped

This double page form is designed especially for country shippers in keeping a complete record of each car of grain shipped from any station or to any firm. On each double page are the following column headings: Date Sold, Date Shipped, Car No., Initials, To Whom Sold, Destination, Grain, Grade Sold, Their Inspection, Discount, Amount Freight, Our Weight, Bushels, Destination Bushels, Over, Short, Price, Amount, Freight, Other Charges, Remarks.

The book is 9 1/2 x 12 inches, and contains 160 pages of ledger paper, 29 lines to each page, and has spaces for recording the foregoing facts regarding 2320 carloads. It is well bound in strong boards with karetol back and corners.

Order Form 385. Price, \$2.50.

GRAIN & FEED JOURNALS

Consolidated

332 So. La Salle St.

Chicago, Ill.

GRAIN & FEED JOURNALS

CONSOLIDATED
INCORPORATED

332 S. La Salle St., Chicago, Ill., U.S.A.

Charles S. Clark, Manager

A merger of
GRAIN DEALERS JOURNAL
Established 1898

AMERICAN ELEVATOR &
GRAIN TRADE
Established 1882

THE GRAIN WORLD
Established 1928

PRICE CURRENT - GRAIN REPORTER
Established 1844

Published on the second and fourth Wednesdays of each month in the interests of better business methods for progressive wholesale dealers in grain, feed and field seeds. It is the champion of improved mechanical equipment for facilitating and expediting the handling, grinding and improvement of grain, feeds and seeds.

SUBSCRIPTION RATES to United States, Canada and countries within the 8th Postal Zone, semi-monthly, one year, cash with order, \$2.00; single copy current issue, 25c.

To Foreign Countries, prepaid, one year, \$3.00.

THE ADVERTISING value of the Grain & Feed Journals Consolidated as a medium for reaching progressive grain, feed and field seed dealers and elevator operators is unquestioned.

Advertisements of meritorious grain elevator and feed grinding machinery and of responsible firms who seek to serve grain, feed and field seed dealers are solicited. We will not knowingly permit our pages to be used by irresponsible firms for advertising a fake or a swindle.

LETTERS on subjects of interest to those engaged in the grain, feed and field seed trades, news items, reports on crops, grain movements, new grain firms, new grain elevators, contemplated improvements, grain receipts, shipments, and cars leaking grain in transit, are always welcome. Let us hear from you.

QUERIES for grain trade information not found in the Journal are invited. The service is free.

A GOOD ARGUMENT in favor of farmers concentrating on production of a few approved grains is afforded by the testimony of a line company manager recently before the Turgeon commission of Canada who stated his company had in its 281 elevators 240,000 bus. of grain that could not be shipped because made up of parcels of different grades too small for carload shipment.

RESIGN is a word appearing with unusual frequency recently in our news columns in connection with managers who have acquired elevators of their own, or wish to devote their attention to some other calling, so that the number of openings for trained elevator operators is increasing, and the movement of the new crop will find many new faces at the scale beam.

TENANTS are interested only in getting out of the farm as much as possible during the short period of the lease and the A. A. A. is finding it difficult to gain their support for soil conservation that leaves them out of pocket for the benefit of the landowner. Half of all the farms in Iowa are rented. Even owners balk at soil improvement requirements that prevent cashing in on present high crop values.

ANTI-FRICTION BEARINGS are surely winning a place in the elevator field, as is reflected by the many substitutions of anti-friction bearings for the old sleeve type friction producers of the last century. Elevator operators have come to recognize the great advantage of installing anti-friction bearings, and thereby, reducing their cost of power, oil and labor, as well as reducing the fire hazards of their plants.

GRAIN DEALERS suffering from repeated headaches arising from recent efforts to gain a clear understanding of the requirements of the new laws, taxing and regulating business, will not be delighted with the new bill presented to the Washington legislature for the licensing of every dealer and commission merchant, dealing in agricultural products, in the amount of \$25 a year. What next for the modest business man?

CROP KILLERS are being driven from the Southwest; and the last refuge of the calamity howlers is the Northwest where they deplore the lack of subsoil moisture, admitting that copious spring rains and frequent summer showers will be absolutely necessary to make a crop. Meteorologists tell us that the recent heavy rains in the Ohio Valley are the result of cold polar air meeting warm moisture laden air from the South; and as the sun advances north could not this meeting take place a few months hence in the Northwest, giving that section of the country part of the deluge now worse than wasted in the Ohio Valley?

FEED MIXERS continue to be installed in country elevators in such number that owners must find them very profitable adjuncts to their feed departments.

THE KANSAS professors who are now removing sections of wheat soil under the ice cap and subjecting them to growing temperatures may perform a public service by proving that winter wheat does not "smother" under the ice, as alleged, but never demonstrated, except in the case of alfalfa.

A MILITANT minority of farmers is being organized by the Washington bureaucrats to provide a Yessmen's Chorus of approval for farm regimentation schemes. Eighty-five per cent of the farmers may disapprove of wet nursing; but in the words of a leading labor agitator ten per cent may be "enough to do business with."

ANOTHER North Dakota elevator manager, who attempted to cover up his stealing from his employer by burning the elevator entrusted to his care has been sentenced to the state penitentiary for embezzlement. Modern methods of checking the various activities of elevator agents make it extremely difficult to hide all peculations in a fire.

SIX MORE TRUCKERS have come to grief, because they imposed upon one elevator man to the extent of \$775.00. And, his fighting spirit has exposed these same sharpers to other suffering Iowa elevator men. So many elevator operators have been swindled by these traveling tricksters, the wonder is that they can buy any grain from an elevator man without paying cash in full upon delivery of the grain.

RETAILERS of supplies to farmers desiring a credit statement will find it easier to get the farmer to fill out the statement when he understands that the form is one recommended by the extension service of the state university, as is the case with an excellent form issued recently by the University of Idaho for the benefit of farmers who desire to borrow at lower rates of interest from a bank or production credit association.

THE LANSING, Michigan, college professor who advocated before the Turgeon Royal Commission last week a fixed minimum price guaranty on wheat by the government evidently lost sight of what it costs to subsidize exports from a country producing a great surplus. A few years ago the Canadian government figured correctly that a nickel a bushel bonus was all that could be afforded. The loss on a guaranty might be 50 cents per bushel, or \$211,366,000 on the amount of wheat actually exported in the crop year 1928-29. Why should the taxpayers of Canada impoverish themselves to provide Europeans with cheaper bread?

CHICAGO, ILL., JANUARY 27, 1937

BEARS who expect Argentine dumping to drive the price of wheat down to a dollar will be wise to consider our inflated monetary situation.

THE STAMP TAX on grain sales for future delivery operates to diminish the volume of trading and so lower the prices obtained by growers for their crops.

WORLD weekly shipments of 17,500,000 bus. wheat and flour last week, the largest weekly shipments in four years, are the best evidence that world trade has revived. Ocean transportation now stands at 109 per cent of the 1929 level for all commodities.

ATTEMPTS by the A. A. A. to manipulate the market price of eggs thru the purchase lately of over 200,000 dozen seem to have been no more effective than the lamented Federal Farm Board's use of \$500,000,000 to raise the price of wheat some years ago; and that ended in a financial bad odor.

CLOVER SEED is so valuable that robbers can almost carry away a rich haul in their vest pockets, so owners must expect to be visited frequently by midnight marauders during the next few months. One Ohio dealer recently lost seed valued at \$300.00, and the robbers didn't employ a truck to take it away either.

ACCIDENTS in grain elevators are becoming fewer as elevator operators become better posted as to the danger lurking about their plants. However, it is our distressing duty to report several serious accidents in each number of the JOURNAL. The safeguarding of all moving machinery, and the frequent warning to all workers, should help to reduce the losses of lives and limbs.

HOLDUP ROBBERS have recently visited country elevators about closing time to the great loss of the elevator managers. Recently two such robberies have occurred in Illinois, and in as much as the same tactics were practiced in both cases, our natural conclusion is that the bandits in each case were identical. Evidently, it behooves elevator operators to keep down the supply of cash in the elevator office, or else employ afternoon guards and detectives if they are to discourage or check the activities of these marauders.

LEGISLATION at Washington is slow in taking shape. So impotent is the minority that the drafters of bills have only to placate factions, while pausing to weigh the effect of the contemplated legislation on their own political futures. Bills unwisely enacted into law during 1937 will have been in force long enough to have become boomerangs. Well may they pause, since if performance falls short of promise the fickle populace may turn and rend the utopian spellbinders. Let us hope the legislators will keep their ears close to the ground to learn in time that a halt must be called on laws regimenting business.

LACK of efficient machinery to clean out cockle is costing one New York feed manufacturer dearly in loss of reputation and customers. One poultryman bought two sacks of his scratch feed and in two days 606 chicks died and later the poultryman was informed by the state experiment station that an analysis of the feed showed it contained cockle, classed as a poisonous weed seed, with the statement "we believe that these seeds are responsible for the trouble which you have encountered." Builders of grain cleaning machinery can solve almost any problem put up to them by grain handlers and feed mixers, so there is little excuse for inclusion of harmful ingredients, especially since, after separation they need not be thrown away or burned, as one animal's poison is another animal's food.

WHEN AN INCENDIARY makes four separate and distinct attempts to burn your elevator, it is time you were convinced he is nursing an awful grudge against you and wants you to employ a night watchman and detectives. While all of the fires in the Massachusetts elevator have been extinguished without great loss, their reoccurrence must cause considerable uneasiness in the mind of the elevator owner.

Improved Elevators Will Handle the 1937 Crop

Notwithstanding grain dealers generally recognize the great improvements made in mechanical facilities for handling grain, they hesitate to part with their old plants simply because the equipment is obsolete. The longer one uses any mechanical equipment the more difficult it is to part with it. Familiarity seems to breed blindness to its many shortcomings.

However, our News columns in this number tell of the razing of four worn out plants, and the building of many new ones.

Glowing prospects for large crops the coming season has stimulated an increased interest in the rehabilitation and modernization of grain handling facilities. Grain merchants generally recognize that now is the opportune time to make much needed improvements in order that they may handle more expeditiously the grain brought to their scales. Hence, 1937 promises to bring about greater activity in the remodeling and improving of old elevators, and the building of new than for years. Grain elevators generally have been sadly neglected during the last six years, and naturally most of them are suffering seriously from a chronic case of obsolescence.

Progressive grain merchants are not content to struggle along with old worn out equipment when urgent business crowds their driveways for prompter and better service. Running small capacity legs nights and Sundays in order to clear the way for the next day's receipts does not leave the elevator operator time to look after the details of his business or to promote friendly relations with his patrons.

Greatly improved highways encouraging the use of larger and larger trucks has made necessary the installation of stronger and more dependable scales, faster and more convenient dumps, larger capacity legs, more efficient head-drives, distributors and cleaners, as well as more bins. All will contribute materially to more efficient and prompter service as well as to the more economical operation of the plant.

The old slogan that "He who serves best profits most" is just as true of the elevator business today as any other commercial activity.

The study of fire hazards of grain handling plants has enabled the mutual companies specializing in this class of risks to affect a great reduction in fire insurance costs to owners who correct known fire hazards, and thereby reduce the number of elevator fires.

Recent increases in the cost of building materials, labor and equipment are but a warning of what may be expected later. The inconvenience, the delay and the waste accompanying the operation of out-of-date equipment increases the cost of handling grain so much that even the most timid must recognize the handicap of continuing the operation of their worn out equipment. Although they know their investment will be returned to them through attracting new and greater business as well as through their reduced operating expenses. Not only do our news columns reflect a greater activity in the improvement of all elevators during the coming season, but the convictions and daily mail of elevator builders and supply men carry the same conclusion.

The tabular statement of improvements made during 1936, which is presented on this page, are but a reflection of the greater activity certain to be realized during 1937. He who prepares to handle efficiently the coming crop in advance will have time to secure a well planned properly constructed plant while the procrastinator will get only the remnants of a rush job.

Reported in Grain & Feed Journals During 1936

New Elevators:			Storage Annexes:		
	Country	Terminal*		Country	Terminal*
Arkansas	2	..			
California	2	1			
Canada	1	1	Canada	1	2
Colorado	1	1			
Illinois	14	2	Illinois	1	3
Indiana	11	1	Indiana	1	1
Iowa	11	..	Iowa	2	1
Kansas	14	3	Kansas	1	..
Kentucky	1	1	Kentucky	1	1
Michigan	16	1	Michigan	2	2
Minnesota	19	2	Minnesota	1	1
Missouri	4	..	Missouri	1	1
Montana	2	..	Montana	1	..
Nebraska	7	1			
Ohio	10	1	New Jersey	..	1
No. Dakota	16	1	New York	..	2
Oklahoma	7	..	No. Dakota	1	..
Pac. N. W.	4	5	Ohio	..	3
Pennsylvania	1	..			
So. Dakota	8	..	Pac. N. W.	5	1
Southeast	1	..			
Tennessee	..	1			
Texas	13	2	Southeast	..	1
Wisconsin	2	1			
Totals	166	25	Texas	..	2
Grand total			Wisconsin	1	3
(new)	191	..	Totals	19	25
			Grand total		
			(annexes)		44
Feed Mills, new	126				
Improvements:					
Remodeled or enlarged	185				
Overhauled	36				
Magnetic separators installed	62				
Truck dumps installed	313				
Scales installed	379				
Complete electrification	69				
Accidents (elvt. & feed mill):					
Fatal	14				
Not fatal	32				
Total accidents	46				
Warehouses and Mills (new and addns.)	150				
Sweet feed systems installed	2				
Feed machinery installed	535				
All other equipment installed	353				
General repairs made	259				
Oil stations installed	16				
Coal sheds built	33				

*Having a capacity of 100,000 bus. or over.

Elevator and Feed Mill Fires

It is truly quite encouraging to note the reduced number of destructive fires in grain elevators and feed mills. While the razing, wrecking and consolidating of surplus elevators has effected some reduction in the number of elevators, the continued operation of old, worn out plants effects no reduction in the fire hazards of this class of risks.

The building of reinforced concrete elevators, free from wood and other combustible material, the iron cladding of wood elevators protecting them against locomotive sparks and exposure hazards, together with the protection of the plants with standard lightning rods has helped materially to reduce the fire hazards as well as the number of fires and the cost of fire insurance.

The installation of anti-friction bearings, many of which are noted in our news columns each issue, also contribute materially to the reduction of friction fires.

Several of the fires reported in this number are traced to short circuits, but fortunately elevator owners are beginning to recognize the danger of this prolific cause of fires in electrically equipped plants, so many are placing all wires in conduits, thereby minimizing the danger of short circuits.

The persistent efforts being put forth by farsighted elevator owners to reduce the fire hazards of their plants supports the conviction that these same cautious owners will correct other hazards as they become better posted as to their presence in their plants.

While the number of fires and the annual fire loss are still excessive, the gradual correction of known hazards and the accompanying reduction in fire losses gives most encouraging assurance of continued improvement in the grain elevator properties generally, from a fire insurance standpoint.

The cause is not known of all the fires reported in this number, but of the known causes, defective wiring leads, with an over-heated engine, excessive electrical surge and exposure contributing their share. Two other fires are credited to incendiary origin.

Fortunately, elevator owners insured with the mutuals profit directly from the reduced number of fires, and volume of fire losses in a reduced premium. So, all owners are encouraged to continue their efforts to reduce fire hazards and fire losses.

Elevator and Feed Mill Fires
Reported in Grain & Feed Journals During 1936

Elevators:		Feed Mills:	
De-	Dam-	De-	Dam-
stroyed	aged	stroyed	aged
California ...	2	Arkansas	1
Canada	6	California	2
Colorado	1	Canada	1
Illinois	15	Colorado	1
Indiana	10	Illinois	1
Iowa	17	Indiana	1
Kansas	9	Iowa	2
Kentucky	1	Kansas	2
Michigan	11	Kentucky	1
Minnesota	11	Michigan	4
Missouri	8	Minnesota	3
Montana	8	Missouri	3
Nebraska	5	Nebraska	2
New England	1	New England	1
New Mexico	1	New York	5
New York	1	No. Dakota	1
No. Dakota	20	Ohio	5
Ohio	11	Oklahoma	1
Oklahoma	4	Pac. N. W. ...	3
Pac. N. W. ...	2	Pennsylvania ..	5
Pennsylvania ..	2	Southeast	2
So. Dakota	7	Tennessee	1
Southeast	1	Texas	2
Tennessee	1	Wisconsin	7
Texas	3	Totals	48
Utah	2	Total Feed Mill	
Wisconsin	2	Fires	50
Totals	161		
Total Elevtr.	94		
Fires	255		

ONE OF THE most encouraging signs of the country elevator business today is the prompt rebuilding of 95% of the elevators burned this year. Elevator operators who survived the drouth of '34, the black rust of '35 and the greater drouth of '36 feel certain it cannot happen again and they are preparing with every confidence to handle a big business next year.

THE CLOSER GRADING of grain, and the careful testing of field seeds is encouraging elevator operators to install more and better cleaners, so that a number of installations of improved cleaning machinery are recorded in the news columns of each number. The elevator operator who makes use of modern cleaning facilities, profits immensely from its operation, but the hate-works profit not at all from such installations. The intelligent use of the modern cleaning facilities not only improves the grading of every shipment, but provides a supply of tailings for grinding in with other feeds.

Calling on the Farmers

Among grain and feed dealers has grown the go-getter business method of calling on the farmers, getting orders at the house, or out in the barn yard, while the farmer is doing his chores.

Doubtless the practice had its origin in the high pressure sales methods of specialty manufacturers, who, finding too much sales resistance at the local elevator, went out to the farmers, then returned to the elevator to offer its manager the usual commission on a bookful of orders they had taken, provided he would stock their lines. Local dealers could not refuse such easy money.

It was only natural for energetic retailers to follow the same plan, or hire outside salesmen for this purpose. What a fine lot of business this plan developed!

The further extension of service by making deliveries was another natural step. A good many grain and feed dealers now keep a half-ton truck for the sole purpose of delivering the sack or two of feed demanded by the farmer whose supply "has just run out." Some farmers are always running out of feed.

With all this scurrying to and fro, this hurried dumping of a sack or two of feed in the run-about, or in the dealer's personal car, with all this excited burning of gasoline, feed profits have not increased. Instead they have shrunk. Almost without exception grain and feed dealers now receive the smallest gross and net margins between merchandise costs and retail prices of any class of business men.

We have no criticism to offer on the energy that develops farm to farm solicitations. The spirit is fine. But we wonder if the practice is not overdone. Calling on a country grain dealer late one afternoon we were advised, "I've been keeping track. You are the 17th traveling man who has called on us today."

A country grain dealer may be expected to develop the good grace in handling his callers that comes with practice. But suppose that happened to a farmer? When would his fields get plowed? When would his cows be milked?

Calling on the farm trade by phone or in person is a healthy practice, provided it is done wisely, with due consideration to the farmers' time and the farmers' problems. The dealer who is fortified with an intimate knowledge of the conditions under which a farm is kept, and the habits and inclinations of the farmer concerned can be most helpful in solving farm problems, and is wisest in handling credit. But those dealers who have been most successful in calling on farm trade practice this habit sparingly, and develop their sales by the indirect route of talking about farm problems, and of being good neighbors.

A Man Is Successful

when he refuses to misrepresent or belittle his enemies; when he does not expect to get paid for everything he does; when he does today the things he might put off until tomorrow; when he is loyal to his employer and to his associates; when he intelligently co-operates with others and is tolerant in thought and deed; when he strives earnestly to win the higher estimation of his fellows.

Asked—Answered

[Readers who fail to find trade information desired should send query for free publication here. The experience of your brother dealers is worth consulting. Replies to queries are solicited.]

When Were Monolithic Tanks First Constructed?

Grain & Feed Journals: When and where was the first monolithic concrete grain tanks or grain elevator erected and how long did it take to pour the concrete? Is the building still standing?

If concrete storage bins are not poured continuously from start to finish will a driving rain beat in through the seams in the outside walls?—B. J. Tarry.

School for Elevator Operators?

Grain & Feed Journals: Are there any schools or training courses for elevator operators?—John W. Bell, Watseka, Ill.

Ans.: Some of the agricultural colleges have had short course meetings aiming at the informing of elevator helpers.

Real experience as an assistant is the best teacher. An assistant learns the practices at the station where he works, and develops an ability to judge the responsibility of patrons and how to meet their whims.

The grading school conducted at Purdue University, Lafayette, Indiana, last spring, was attended by so many elevator operators who were anxious to learn the technique of classifying grain that the two-day courses will be given again in the near future.

A barley grading school was held at Milwaukee at the convention of the National Ass'n. last October, and the entire grading school will be held at the Dallas convention of the National Ass'n next October.

The U. S. Circuit Court of Appeals at New Orleans Jan. 21 refused to issue an order restraining the collection of the windfall tax from five rice milling companies of Texas, holding that even if the tax is unconstitutional the plaintiffs have an adequate remedy at law.

Coming Conventions

Trade conventions are always worth while, as they afford live, progressive grain dealers a chance to meet other merchants from the same industry. You can not afford to pass up these opportunities to cultivate friendly relations and profit by the experience and study of others.

Feb. 2, 3, 4. Farmers Grain Dealers Ass'n of North Dakota, Grand Forks, N. D.

Feb. 16, 17, 18. Farmers Elevator Ass'n of Minnesota, Minneapolis, Minn.

Feb. 22. Pacific Northwest Feed Ass'n, Seattle, Wash.

Feb. 22, 23. Farmers Grain Dealers Ass'n of Ohio, Toledo, O.

Feb. 23, 24, 25. Farmers Grain Dealers Ass'n of Illinois, Pere Marquette Hotel, Peoria, Ill.

Feb. 26, 27. Eastern Federation of Feed Merchants, Syracuse, N. Y.

May 10, 11. Illinois Grain Dealers Ass'n, Decatur Ill.

June 1, 2. Pacific States Seedsmen's Ass'n, Santa Barbara, Cal.

June 10, 11. American Feed Manufacturers Ass'n, Homestead Hotel, Hot Springs, Va.

June 14. Farm Seed Group, Statler Hotel, Cleveland, O.

June 14 to 17. American Seed Trade Ass'n, Statler Hotel, Cleveland, O.

June 21, 22. Ohio Grain, Mill & Feed Dealers Ass'n, Breakers Hotel, Cedar Point, O.

October 11, 12. Grain & Feed Dealers National Ass'n, Dallas, Tex.

From Abroad

In England there is a wave of popularity for vitamin and mineral containing foods.

Argentina is cutting wheat in the south to finish the harvest and yields are fairly good.

Manchuria's 1936 soybean crop is estimated at 4,602,000 short tons, compared with 4,172,000 tons in 1935.

Exportable wheat surplus of Southern hemisphere is estimated by Broomhall at 212,000,000 bus. as of Jan. 15.

Six prominent Germans sailed for Argentina Jan. 19 to negotiate the purchase of grain in exchange for German finished goods.

Mussolini is reported to have completed the purchase of 42,000,000 bus. of foreign wheat, if cables are not in error as to the figures.

Germany will be able to import 2,500,000 bus. Canadian wheat under the trade agreement, against the very small imports of 1935 and 1936.

English millers will use only 30 per cent instead of 50 per cent of Canadian wheat beginning Feb. 1 on account of the cheapness of southern hemisphere wheat.

Italy has begun a campaign for increased acreage of wheat. Orders were issued by Mussolini after his announcement that this year's wheat crop was 25 per cent below the average of the last three years.

Argentina has established a new grade to be known as Rosafe semi-hard No. 2 "panza blanca" permitting a maximum of 60 per cent of white belly, better known in North America as yellow belly. In parts of Santa Fe and Cordoba the entire crop is affected by this blemish.

Argentine Wheat Exports during recent weeks have been as follows, the figures for the like week a year ago in parentheses: Jan. 23, 7,695,000 (436,000); Jan. 16, 5,711,000 (645,000); Jan. 9, 3,926,000 (1,076,000); Jan. 2, 4,183,000 (803,000); Dec. 26, 3,218,000 (704,000 bus.), according to Broomhall. Not since March, 1929, have the weekly shipments exceeded 7,695,000 bus. The weekly clearances from Argentina broke all records, with 20,841,000 bus. all kinds of grain and flaxseed. The figures might have been even larger, but for shortage of ships and high freight rates.

Program Farmers' Grain Dealers Ass'n of North Dakota

The annual convention of the Farmers Grain Dealers Ass'n of North Dakota will be held at Grand Forks, N. D., Feb. 2, 3 and 4.

Each session will be preceded by music from the Grain Men's Band.

R. I. Mansfield, Chicago, will deliver an address; and Even Hall of the Milwaukee Railroad will speak on "Importance of Wheat to the Dakotas." Income tax exemptions will be the subject of a third address.

Entertainment will include hockey game between Grand Forks Club and Canadian Club; theater party; banquet at 6:30 Wednesday with floor show, followed by dance in the States Ballroom, East Grand Forks.

The A.A.A. has increased diversion payments in north central and western regions 7 per cent.

Legislation at Washington

Rep. Drew of Pennsylvania has introduced joint resolution 122 declaring a policy in rate making with respect to port traffic.

Unemployment insurance tax payments may be made until Apr. 1 without assessment of interest, the Treasury department having on Jan. 21 extended the Jan. 31 deadline, as several states have not set up the administrative machinery for recently enacted security laws.

Amendment of the undistributed corporate profits tax law is provided for in a bill introduced Jan. 22 by Senator King to exempt from the levy debt payments and expenditures for improvements to plants. The debt exemption would apply only to obligations incurred prior to April 30, 1936. Both exemptions, under the King proposal, would apply retroactively to last year's corporate income.

Federal licensing of business concerns is the subject of hearings begun Jan. 25 by a senate com'te on the Mahoney bill. The bill would enlarge the present membership of the federal trade commission from five to nine and vest in the enlarged body the corporate licensing powers. Corporations seeking licenses would be required to agree to certain stipulations as to future conduct of their affairs. They include Equal pay for men and women employees performing similar work. Submission to the national labor relations board and obedience to its rulings. Increased pay for employees as the hiring company's income rises. Open books for trade commission investigators as to costs, profits, prices "and other questions at issue for the confidential use of the employees and employers." Acquiescence in the trade commission's orders which may be issued to ban "dishonest or fraudulent trade practices."

Incentives to Speculative Action

THOMAS TEMPLE HOYNE in the Economic Focus

The most powerful incentives to speculative action are greed and fear. Again and again these psychological anarchists rise to fury, overthrow reason, and plunge the mind into the lawlessness of panic. These emotions are among every man's most rebellious passion; and the degree of his control over them measures the civilization he has attained.

Unrestrained, greed and fear directed primitive life in which murder and theft seemed the most successful methods in the struggle for existence.

Significant is the distinction between modern strife for dollars and the clubbing of one another over scraps of food by cave-men that victories nowadays are won mentally rather than physically—by control of emotions rather than by giving them rein.

To have even a chance of success in speculation the first necessity is to keep the upper hand over greed and fear.

In the psychological background of a great speculative market dormant emotion is always threatening to become the dominating urge to action. When prices are rushing upward or breaking swiftly, greed and fear are continually submerging individual personalities into psychological crowds moved by a single contagious belief.

"Thousands of isolated individuals," says Gustave Le Bon, "may acquire at certain moments, and under the influence of certain violent emotions, the characteristics of a psychological crowd."

In a speculative market the most important characteristic of a psychological crowd is sudden unity in impulsive buying or selling regardless of price.

Letters from the Trade

[The grain dealers' forum for the discussion of grain trade problems, practices and needed reforms or improvements. When you have anything to say of interest to members of the grain trade, send it to the Journals for publication.]

Public Notice of Sale on Delivery

Grain & Feed Journals: Controversies sometimes arise in fluctuating and rising markets as to whether grain hauled to the elevator was sold on delivery, or was to be settled for subsequently at a time agreeable to the seller.

It is my observation that country elevator operators are becoming more cautious and approaching uniformity in the practice by requiring grains delivered to be sold at once.

For some time I have been thinking of suggesting a sign for inside and outside use something like the following:

Unless other arrangements are made all grains will be considered sold on day of delivery.
During harvest periods the last load will govern date of delivery.

I notice many signs similar to this one. I suggest that the Journal prepare such a sign both for inside and outside use. If printed the cost would be less than having a painter paint one, and besides it would be uniform and tend to bring about a more uniform policy among grain dealers.—I. W. Larrick, manager Stonington Co-operative Grain Co., Stonington, Ill.

Preventing Pressure Tank Explosions

Grain & Feed Journals: Air tank explosions cannot be blamed on any one thing as there are many contributing factors. We furnish compressors to most of the manufacturers of grain dumps. However, in most cases, we do not furnish the air tank, the motor or gasoline engine to drive the compressor, nor do we have anything to do with the installation, location of the equipment, piping arrangement or any of the accessory equipment.

There are, however, a number of precautions which should be observed in installing compressor equipment in grain elevators and if these precautions are observed the likelihood of tank explosions will be materially lessened.

It is recognized that in the grain industry just as in the textile and other industries, dust (or lint) creates definite explosive atmospheric conditions. Precautions should be taken, therefore, to minimize this condition as far as possible. Care should be taken that the equipment—that is, the compressor, tank, motor or gasoline engine are not installed where they will have to operate in a dusty atmosphere. The spark of motor brushes, ignited carbon in the exhaust of a gasoline engine, or the heat itself in a motor, gasoline engine, compressor or air tank, may be sufficient to ignite an explosive atmosphere. The equipment under such conditions will naturally accumulate an insulating coating of dust (which adheres to the oily surface of the equipment) making it impossible for it to radiate its heat so that it overheats to a greater degree than is normal. Therefore, the location of the equipment is an important factor. It should be located in a cool, clean, accessible place so that it is not only clean to start with but can be kept clean.

It is advisable to have a strainer on the intake of the compressor and if it is impossible to locate the compressor where cool, clean air is available, the intake should be piped to such a point with a minimum length of piping and minimum number of bends in the piping and the piping should be larger than the intake so as to prevent pumping a vacuum.

Galvanized spouting can be used for intake piping.

TANKS. These are usually furnished by the manufacturer of the grain dump or in some cases by the customer and in the latter case we know of instances where an ordinary range boiler has been used which is not suitable or safe for the air pressure required. The tank must be carefully selected as to—

a—Type of construction—i.e., thickness of material, nature of the seams and so on, for the working pressure required.

b—Must have a suitable factor of safety. Should be tested for several times the working pressure actually carried.

c—It must be of the proper size.

d—It must have suitable provisions for frequent, regular and easy draining.

e—It must be provided with a suitable pop safety valve of the proper type and size. This is of particular importance. Cheap pop valves are false economy.

The compressor should be large enough so that it can take care of peak load conditions without operating for such long periods as to cause overheating.

The compressor should be operated at speeds recommended by the manufacturer for the pressure carried. A compressor that is too small has to be operated at excessive speeds and for periods longer than are recommended, causing overheating. The proper grade of oil should be used, not one with a low flash test, which oil or its vapor will ignite easily under ordinary high temperatures. The oil should be regularly drained from the crankcase and refilled with clean oil of the proper grade with just the same care as is observed in the case of an automobile. We recommend a light oil such as used for automobile engines. Do not use steam engine oil.

UNLOADERS: Most of the compressors installed for this service are supplied with a hand unloader to permit starting the motor or engine against no load. In the case of a motor driven compressor, however, it would be desirable to have the compressor fitted with an automatic starting and stopping device which automatically cuts out the motor when maximum pressure has been reached and starts it up when the pressure in the tank has dropped to the minimum and when starting, it should start automatically against no load. In the case of gasoline engine driven or line shaft driven compressor, we recommend an air pressure unloader which unseats the suction valve of the compressor when maximum tank pressure has been reached so that the compressor will not pump air until the tank pressure has dropped to the minimum again. With either an automatic starting and stopping device for motor driven units or with air pressure unloader for engine or line shaft driven units, you provide against the possibility of the compressor pumping air into the tank after maximum pressure has been reached. Under the latter conditions if either no safety valve has been provided or if the safety valve is not functioning properly because of being set for too great a pressure or because it is clogged with impurities, the compressor continues to pump air beyond the maximum working pressure necessary to carry in the tank, and naturally the compressor is going to overheat.

The above recommendations are all of importance and any one or more of them if ignored might bring about a condition which is favorable to tank explosions. Most of these

conditions are such that the responsibility therefor can not be attributed to the compressor and they are beyond our control as the compressor manufacturer. If the above precautions are taken the conditions favorable to tank explosions will be minimized to the greatest possible degree.—Curtis Pneumatic Mch'y. Co., St. Louis.

Increased Taxes

Grain & Feed Journals: All dealers are kicking about the multiplicity of taxes on business. There is going to be more tax added as legislatures meet. Our new governor emphatically declared himself against any increase in taxation, but about the first twenty bills introduced into the state legislature were tax increasing bills. Barber Commission is to have an increase and there is to be an increase in the salaries of officers and almost everybody connected with the State Government. We can only hope that taxes won't go higher, but they certainly will.

In this state, doubling the price of grain and seeds off the farm has terrifically increased the gross income tax, which all will have to pay. It used to be said that the chief end of man was to serve God, but now it appears as though the chief end of man was to hustle day and night to raise money to pay taxes. People by an overwhelming majority endorsed extravagance in government and we will just have to go along with it.—Goodrich Bros. Co., by P. E. Goodrich, Winchester, Ind.

Only Four Grain Dust Explosions in 1936

Dust explosions in 1936 were four in number: At Kansas City June 4 in boot of receiving leg of Commander-Larabee Milling Co., small loss; at Moorhead, Minn., July 7 in feed mill of Farmers Elevator Co., loss \$500; at Troy, N. Y., in July, in dust collector of Upper Hudson Rye Flour Mills; and at Mobile, La., Oct. 27, an explosion blew the top off W. L. Sanborn's elevator.

Rectification of Charter Party

Louis Dreyfus & Co., grain importers of Paris, France, were defendants in a suit brought by John Chandris, owner of the Greek steamer Mimis Chandris, to have a mistake in the charter party corrected.

Two brokers agreed for the hire of the vessel to carry a cargo of flaxseed from two ports in India for a certain freight. The steamer was guaranteed to have a capacity of 2,000 tons minimum and 2,300 tons maximum. The charterers were to have the option to load groundnut kernels at so much a ton extra. The charter party was drawn up by the charterers and signed by both parties.

The shipowner alleged that the charter party was signed by his broker without noticing that it did not correctly express the agreement between the parties. In the charter party the guaranty was stated to be in respect, not of linseed only, but in respect of linseed and/or groundnut kernels in bags. That was not the bargain and the shipowner asked to have the charter rectified accordingly.

The charterers denied that there was any mistake in the charter party, which, they said, was in accordance with the oral agreement, and correctly expressed the intention of the parties.

The judgment of the court, by Justice MacKinnon of King's Bench Division, was that the oral evidence and the contemporary documents showed that the agreement intended to be drawn up was that the guaranty of capacity was only that the vessel was of such a size that she could take a minimum tons of linseed in bags and that the charter party must be rectified in accordance therewith.

Crop Reports

Reports on the acreage, condition and yield of grain and field seeds are always welcome.

Hazleton, Ind.—Breaking of a levee on the White river above here on Jan. 19 inundated about 25,000 acres of wheat.

Plymouth, Kan., Jan. 10.—Corn and grain sorghums were a complete failure here in 1936. Drouth, heat, grasshoppers and chinch bugs all contributed to the failure.—J. D. Collins.

Kirkland, Ill., Jan. 20.—Corn is going low grade 4 and mostly 5 on account of moisture. General conditions in DeKalb County are good, much better than central and southern Illinois.—L. W. Colton, mgr. Kirkland Coal & Feed Co.

Kansas City, Mo.—Average protein of 690 cars of wheat tested by the Kansas City office of the Kansas grain inspection department during December was 13.66%, and 483 cars tested by Missouri averaged 13.90%.

Washington, D. C.—The quality of the 1936 corn crop, all classes, based on inspected receipts at representative markets, Dec. 1 to 31, 1936, was as follows, in percentages by grades: Grade 1, 2%; grade 2, 8%; grade 3, 28%; grade 4, 39%; grade 5, 20%; sample grade, 3%.—U. S. Dept. of Agriculture.

Omaha, Neb.—The average protein content of the 11,471 cars of Nebraska wheat received in this market between July 1 and Dec. 31 was 13.69%. In both protein content and test weight the 1936 crop of Nebraska wheat was extraordinarily good, according to Harry R. Clark, chief inspector of the Omaha Grain Exchange.

Winchester, Ind., Jan. 23.—We have a blanket of at least six inches of snow on the level; there was no wind so it was not drifted. Ground is thoroughly saturated with moisture as it hasn't been for years. This snow falling on

it will put our wheat in most wonderful shape. —Goodrich Bros. Co., P. E. Goodrich, pres.

Decatur, Ill., Jan. 23.—The condition of winter wheat is mostly fair to good or little changed up to the present time by the open winter from the near average condition reported last fall. Wheat damage reports are mainly confined to flooded lowlands in extreme southern counties. Soil moisture conditions have been improved by the general rains this month.—Baldwin Elevator Co.

Ottawa, Ont., Jan. 22.—Last year's aggregate yield of wheat in Canada was 229,218,000 bus., compared with the revised estimate of 281,935,000 in 1935; barley, 71,922,000 bus., compared with 83,975,000 in 1935; rye, 4,281,000, against 9,606,000; flax, 1,795,000, against 1,472,000. —The estimated oats production for 1936 is 271,750,000 bus., compared with 394,000,000 in 1935. Oats production in western provinces is given at 135,362,000 bus. in 1936, and 244,854,000 in 1935.

Pullman, Wash.—In a 1937 forecast of wheat conditions in Washington state, the Washington state agriculture department warned farmers here of overplanting in 1937. "In view of prospective large wheat supplies and lower prices in 1937, Washington wheat growers should give careful consideration to the disposal of surplus wheat this season and to avoidance of overplanting spring wheat if a large winter crop is in prospect at spring wheat seeding time.—F. K. H.

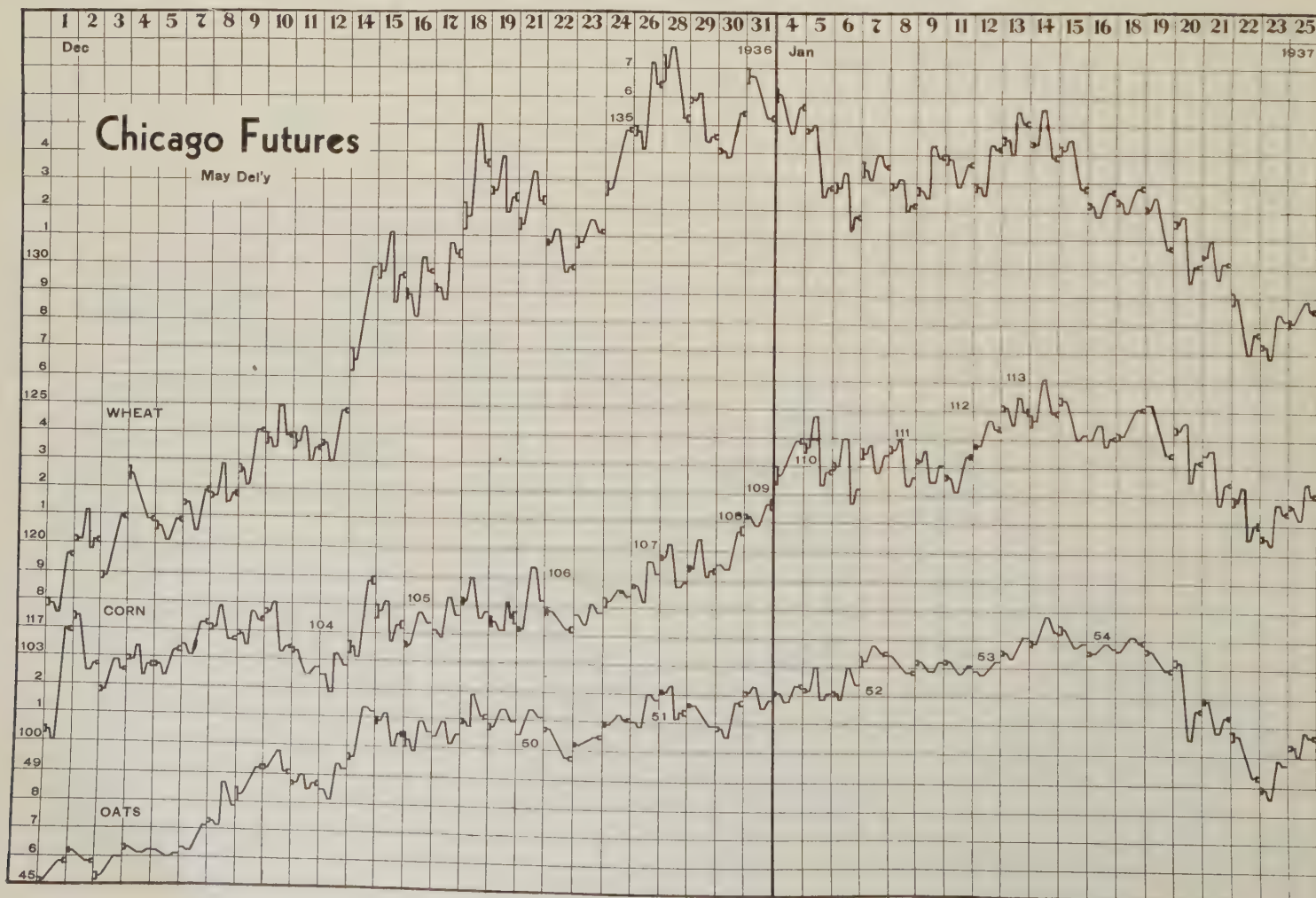
Minneapolis, Minn., Jan. 23.—Reports are coming in from California in regard to the growing flax crop in that section. In the Imperial Valley trade estimates placed this year's acreage at around 20,000. At least a similar quantity has been planted in the northern valleys. In the Imperial Valley weather conditions have been more favorable than last year and some early fields are now showing stands of about 12 inches. In the northern sections, frost has injured such a large percentage of the acreage that new plantings will have to be done in a great number of the fields.—Archer-Daniels-Midland Co.

Evansville, Ind.—The Ohio river during the third week in January reached its greatest flood stage. At Evansville on Jan. 23, the stage

went to 48.4 feet and was still rising. All tributaries of the Ohio were above flood stage and a great deal of damage was reported to grain and growing wheat. Thousands of acres of growing wheat along the Ohio River, as well as along the Wabash and White rivers, were under water and this will cause more or less damage. Reports say that a great deal of corn in crib along these rivers was swept away or greatly damaged. Feed dealers in many of the towns that were flood-stricken suffered damage and in many instances they carried no insurance. In the event freezing weather takes place after the high water recedes from the growing wheat fields, it is feared the damage to the growing crop will be serious.—W. B. C.

Wichita, Kan., Jan. 23.—There is a sleeping giant west of the Missouri River and north, including the Canadian wheat belt, in the form of an acute shortage of subsoil moisture; 1936 registered the least rainfall from the south plains of Texas on north through Oklahoma, Kansas and north to the northern edge of the Canadian wheat belt, in over 40 years. Our southwestern winter wheat went into the winter a very backward plant in the best parts, and the further west the poorer it becomes. East of a line from Hastings, Neb.; Gt. Bend, Pratt, Kan.; Alva and Altus, Okla. is the better wheat. Most of this section has a thin airtight shell of ice for the past three weeks, which came in the form of sleet, and started to thaw and then froze with temperatures ranging near the zero mark most of the time since. The ground being dry under and sealed from the air is causing much alarm for fear of winter-killing from smothering. The moisture itself would range from a trace to an inch in the eastern parts since Jan. 1.—Smith-McLinden Grain Co.

New York, N. Y.—The Grain Products Corp. has agreed with the Federal Trade Commission to cease using the words "Pilsen Malt" to designate a malt product not made from barley grown in Czechoslovakia, and from use of the word "Pilsen" to imply that the malt product described is made from Czechoslovakia grown barley.



Grain Movement

Reports on the movement of grain from farm to country elevator and movement from interior points are always welcome.

Plymouth, Kan., Jan. 10.—Scarcely any wheat left on farms now, and very little feeding of hogs or cattle being done.—J. D. Collins.

St. Joseph, Mo.—A new high mark in oats receipts for this market was recorded in 1936, when a total of 5,662,000 bus. of oats was received. The previous best figure was 4,760,000 bus., established in 1935.

Kirkland, Ill., Jan. 20.—We are enjoying a fair out-movement of corn, when weather permits shelling, now that we can offer practically \$1 net to the farmer at his crib, and some oats movement.—L. W. Colton, mgr. Kirkland Coal & Feed Co.

Decatur, Ill., Jan. 23.—Dirt roads are in bad condition, and the movement of corn has stopped. Demand from the outside markets does not seem to be so aggressive. Prices are high, and the present feeding ratio is unfavorable, which tends to curtail consumption.—Baldwin Elevator Co.

New York, N. Y.—December receipts of grain were: Wheat 8,109,091 bus., corn 733,000, oats 171,000, rye 1,700, compared with wheat 3,859,283 bus., corn 69,000, oats 146,950, rye 1,700. December shipments of wheat were 2,917,000 bus., compared with 2,334,000 bus. in December, 1935.—Dept. of Information and Statistics, Produce Exchange.

Portland, Ore.—Nearly 5,000 tons of Argentine corn off the freighter *Primerio* has been unloaded to date. No move has been made as yet by Kerr Gifford or other companies to unload the balance of about 500 additional tons. The strike-bound ship was unloaded after maritime strikers consented to aid poultrymen by providing badly needed corn.—F. K. H.

Decatur, Ill., Jan. 16.—Continuous rains have put the country roads in bad shape, which has slowed up the movement of corn. Demand has been good, however at present prices everybody is buying corn strictly on a hand-to-mouth basis. Stocks of corn on farms in Illinois on Jan. 1 were estimated at 132,612,000 bus., last year 236,780,000, 1928-32 average 196,167,000 bus.—Baldwin Elevator Co.

Duluth, Minn., Jan. 22.—Loading out of ele-

St. Joseph 1936 Grain Movement

Receipts and shipments of wheat, corn and oats, in bushels, at and from St. Joseph, Mo., for the calendar year 1936, as reported by N. K. Thomas, sec'y, were as follows:

Receipts	Wheat	Corn	Oats
January	312,000	463,500	538,000
February	212,800	433,500	526,000
March	283,200	715,500	920,000
April	108,800	778,500	306,000
May	123,200	396,000	198,000
June	250,400	595,500	252,000
July	5,180,800	216,000	484,000
August	622,400	292,500	548,000
September	396,800	123,000	390,000
October	408,000	181,500	394,000
November	187,200	282,000	408,000
December	296,000	348,000	698,000
Total 1936 ...	8,361,600	4,825,500	5,662,000
Total 1935 ...	6,864,000	3,361,500	4,760,000
Total 1934 ...	5,744,000	8,601,000	3,758,000
Shipments	Wheat	Corn	Oats
January	236,800	312,000	66,000
February	92,800	243,000	208,000
March	358,400	318,000	210,000
April	148,800	469,500	358,000
May	257,600	522,000	220,000
June	385,600	429,000	44,000
July	2,728,000	175,500	76,000
August	678,400	141,000	104,000
September	393,600	82,500	100,000
October	428,800	72,000	82,000
November	408,000	91,500	36,000
December	420,800	57,000	50,000
Total 1936 ...	6,537,600	2,913,000	1,554,000
Total 1935 ...	4,716,800	3,105,000	654,000
Total 1934 ...	5,964,800	7,958,000	1,034,000

vators has been steady and in good volume, the weekly shipments running close to half a million bus. and total holdings here at the close of business Jan. 23, down to 14,371,000 bus. Only 8,000,000 bus. of this is domestic, the balance being Canadian grain in bond. Total wheat stocks are down to about 5,000,000 bus., just about what they were a year ago.—F. G. C.

St. Joseph, Mo.—Local consumption of grain by industries during 1936 was reported at 7,878,497 bushels as compared to 8,152,822 bushels in 1935. A total of 983,367 barrels of wheat, corn and oats products was reported for the year, compared to 1,128,835 barrels in 1935. Barrels shipped amounted to 1,006,023 compared to 1,103,125 in 1935. A total of 154,299 tons of feed and offal were produced during the year compared to 137,318 in 1935; shipments were 157,357 tons versus 122,939 last year.

Omaha, Neb.—December receipts of grain were: Wheat 563,200 bus., corn 1,625,400, oats 464,000, rye 15,400, barley 56,000, compared with wheat 646,400 bus., corn 2,144,800, oats 352,000, rye 29,400, barley 222,400 in December, 1935. Shipments during the same period were: Wheat 676,823 bus., corn 1,433,202, oats 1,448,892, rye 41,748, barley 62,471, compared with wheat 330,400 bus., corn 1,652,828, oats 253,323, rye 29,400, barley 169,550 in December, 1935.—F. P. Manchester, sec'y Omaha Grain Exchange.

Ottawa, Ont., Jan. 21.—Canadian wheat in store for the week ending Jan. 15 decreased 2,861,114 bus., compared with the previous week and 144,545,012 bus. compared with the corresponding week in 1936. The amount in store, including 2,951,135 bus. in rail transit, was reported as 107,253,684 bus., compared with the revised figure of 110,114,798 bus. for the previous week and 251,798,696 bus. for the week ending Jan. 17, 1936. Wheat marketings in the Prairie Provinces for the week ending Jan. 8 amounted to 1,119,855 bus., a slight increase of 12,539 bus. over the previous week, when 1,187,316 bus. were marketed. During the corresponding week a year ago, the receipts were only 450,516 bus.—R. H. Coats, Dominion Statistician.

Grain Imports

Domestic imports of grain and grain products during the period July-November, 1936, compared with imports during the like period in 1935 (shown in parenthesis), were as follows:

Barley, 6,735,000 bus. (406,000); barley malt, 140,666,000 lbs. (132,591,000); corn, 21,379,000 bus. (23,530,000); oats, 84,000 bus. (44,000); rye, 3,709,000 bus. (2,091,000); rice, 49,909,000 lbs. (9,127,000); wheat, 28,521,000 bus. (21,590,000); flaxseed, 7,053,000 bus. (6,876,000).

In four days recently the United States bought 1,000,000 bus. Argentine corn for January and February shipment, according to Broomhall.

Driveway Observations

By TRAVELER

BEING TURNED into a feed grinding and mixing plant is the Artesian Roller mill at Prairie du Chien, Wis. When the mill was established shortly after the Civil War, John Weniger, its founder, conceived the idea of using artesian water power. He drilled two wells in back of the mill, and struck a fine gush of water at 1,000 feet. The spouting water from the two wells was caught at the surface in pipes and the water pressure used to operate the turbines that power the mill. This artesian well power is still in use, tho Leo Lechnir, the new owner, is installing auxiliary power that he may be sure he can operate additional machinery necessary to the manufacture of feeds.

* * * * *

Jesse Parsley, Baskett, Ky., farmer, uses an ordinary threshing machine for shelling, screening and sacking corn, and for shredding the stalks into fodder. Before a group of skeptics, he has demonstrated by turning out almost 250 bus. in a single afternoon.

Mr. Parsley has added an innovation by arranging a barrel with a trickle feeder on the separator in such fashion as to drip a mixture of molasses and water on the shredded corn stalks as they pass thru the machine, thus flavoring them in the shredding process.

* * * * *

WALTER G. EINSPAHR, manager of the Gleaners & Farmers Elevator Co., at North Hayden, Ind., believes in preparedness. An instance of his foresight is the 100 bbl. cistern kept full of water near the elevator. It was built in accordance with plans worked out by himself and the fire chief of Lowell, just two miles away.

One morning a cry of "Fire" brought everyone out of the neighboring houses to watch red tongues of flame licking along the shingles on the roof of a dwelling located close to the elevator office. Manager Einspahr stepped to the telephone and called "Lowell."

North Hayden, a little place, has no water facilities. Manager Einspahr's cistern saved the day. Six minutes from the phone call the Lowell fire engine had dropped a suction line into the cistern, and in a few minutes the fire was out.

* * * * *

HAROLD L. GRAY, Crawfordsville, Ind., needing temporary heat in his office, hit upon the ingenious plan of setting up oil burning, thermostatically controlled brooding stove.

Use of the brooder stove served a double purpose. Not only did it do a good job of heating the office space involved, but it served as a

Daily Closing Prices

The daily closing prices for wheat, corn, oats, rye, barley and soybeans for May delivery at the following markets for the past 2 weeks have been as follows:

		Wheat															
		Option	Jan.	Jan.	Jan.	Jan.	Jan.	Jan.	Jan.	Jan.	Jan.	Jan.	Jan.	Jan.	Jan.	Jan.	
		High	Low	13	14	15	16	18	19	20	21	22	23	25	26		
Chicago	.....	137 3/4	104 1/4	135	133 3/4	132 3/4	132 3/4	132 3/4	130 3/4	130	130 1/4	127 1/2	128 1/4	128 1/4	128 3/4	
Winnipeg	.....	130 3/4	95 1/4	128 1/2	127 1/4	125 3/4	125 1/4	124 3/4	122 3/4	122	122 1/2	121	121 1/4	122	121 3/4	
Liverpool*	.....	133 1/4	.....	130 3/4	130 3/4	129 3/4	127 3/4	127 3/4	126 3/4	126 1/4	127 1/4	124 3/4	122 3/4	123 3/4	122 3/4	
Kansas City	.....	131 3/4	102 1/4	128 1/2	127 1/4	126 3/4	126 3/4	126 3/4	124 1/4	123 3/4	123 3/4	120 3/4	121 3/4	121 3/4	121 1/4	
Minneapolis	.....	145 3/4	115 3/4	142 3/4	141 3/4	140 3/4	140	140 3/4	138	136 3/4	136 3/4	133 3/4	134 3/4	135 3/4	135 3/4	
Duluth, durum	.....	151 1/4	120	151	150 1/4	149	148	147	143 1/2	144 1/4	144 1/4	141 1/4	143	143 1/2	144	
Milwaukee	.....	137 3/4	98 3/4	135 3/4	134	132 3/4	132 3/4	133	130 1/2	130 3/4	130 3/4	127 3/4	128 3/4	128 3/4	.....	
		Corn															
Chicago	.....	113 3/4	85 1/4	111 3/4	111 3/4	111 3/4	111	112	110 3/4	110 3/4	109 3/4	107 3/4	108 3/4	109	109 1/4	
Kansas City	.....	117	89 3/4	115 1/2	116	114 3/4	115	115 1/4	114 3/4	114 3/4	114 1/4	112 1/2	112 1/2	112 3/4	113 3/4	
Milwaukee	.....	113 3/4	88	112 1/2	112	111 1/2	111 1/2	112 1/2	110 1/2	110 1/4	109 3/4	107 3/4	108 3/4	109 3/4	.....	
		Oats															
Chicago	.....	54 3/4	38 3/4	54 1/4	54 3/4	53 3/4	53 3/4	53 3/4	52 3/4	51 1/2	51 1/4	49 1/4	49 3/4	50 3/4	50 3/4	
Winnipeg	.....	58	42 1/4	56 3/4	57 1/2	55 3/4	55 1/4	55 1/2	54 3/4	54	54 1/2	52 3/4	51 3/4	51 1/4	54 3/4	
Minneapolis	.....	53	39	52 3/4	52 3/4	51 1/4	51 5/8	51 3/4	50 3/4	49 3/4	49 3/4	47 3/4	48 3/4	48 3/4	49	
Milwaukee	.....	54 3/4	40 3/4	54 3/4	54 3/4	54	53 3/4	54	53 3/4	51 3/4	51 1/4	49 1/2	49 3/4	50 3/4	.....	
		Rye															
Chicago	.....	119 3/4	75 1/4	113 3/4	112 1/2	110 3/4	110	110 3/4	109 1/4	108 3/4	108 3/4	107	108	109 3/4	111	
Minneapolis	.....	114 3/4	73 1/4	109 3/4	107 3/4	105 3/4	105	105	103 3/4	103 3/4	103 3/4	101 3/4	104 1/4	105 1/4	106 1/4	
Winnipeg	.....	114 3/4	62 3/4	106 3/4	106 3/4	103 3/4	102	102 3/4	101 3/4	100 3/4	101 3/4	101 3/4	104 1/4	107 3/4	108	
Duluth	.....	111	76 1/4	108	106 3/4	105 3/4	104	104	102 1/2	102 1/2	102 1/2	100 3/4	103 1/2	104	105	
		Barley															
Minneapolis	.....	85 1/4	60 1/2	83 3/4	83 3/4	83 3/4	82 3/4	82 3/4	81 1/2	79 3/4	79 3/4	78 1/4	79 1/4	79 1/4	79 3/4	
Winnipeg	.....	88 3/4	50 3/4	88 1/2	86 3/4	83 1/4	82 1/2	82 3/4	81 3/4	80 3/4	81 3/4	79 3/4	80 3/4	82 3/4	81 3/4	
		Soybeans															
Chicago	.....	161	120 1/2	160 3/4	160 1/2	159 1/4	159 3/4	160	158 1/2	158 3/4	158 1/2	157	157	157 1/2	158	

*At daily current rate of exchange.

demonstrator of the brooder stoves sold by the Gray Agricultural Supply Co., being a practical exhibit of how much heat the stove produced, and how well its thermostat control worked under difficult conditions, where opening and closing doors constantly shifted room temperatures.

* * * * *

A SPECIAL CORN SHELLER has been designed by S. E. Feller, Pine View Farm, Hiawatha, Kan., for shelling ears of seed corn. The selected ears are automatically tipped by nubbars on the sides of the conveyor and then shelled. Following shelling the corn is double graded with machines in the seed house to insure a uniform, high quality seed.

* * * * *

AN EASTERN FEED STORE follows closely a policy of keeping down its inventories of merchandise but pushes vigorously at quick turnover and carefully guards its margins of profit.

"This is not a gambling business," remarks the manager. "If I carried heavy inventories I could make unexpected and large profits when prices go up; but I would make equally unexpected and heavy losses when market prices dropped. These two factors do not balance each other, for a heavy stock of merchandise bought below the market carries a tendency to be sold below the market value.

"Countless times you will find retailers offering a piece of merchandise to a customer, remarking, 'We had this stock on hand when the last raise in prices came. If we had to buy it today we would have to charge more for it.' In many cases this sales talk is at least partly true.

"Keeping inventories low and active reduces the tendency to sell at less than the market value, maintains margins and profits, and enables a dealer to take advantage of new developments in merchandise or prices."

Prices and Currency Debasement

By B. M. ANDERSON, economist of Chase Nat'l Bank, before Chicago Ass'n of Commerce.

It is difficult for the student of economic history to escape the conclusion that sooner or later the present relations between gold dollars of the new par and commodities in general must be radically altered and that a great rise in commodity prices must sooner or later come.

Our own rally in commodity prices since March of 1933 can, I think, be attributed only in very minor degree to our debasement of the dollar. We were bound to have an immense rise in prices in any case, once the unprecedented crisis was over and confidence returned.

The increase in commodity prices from January-February average of 1933 was 3 per cent in 33 months. It is interesting to contrast this with the increase in commodity prices which followed the resumption of gold payments on Jan. 1, 1879, which was 23 per cent in 15 months.

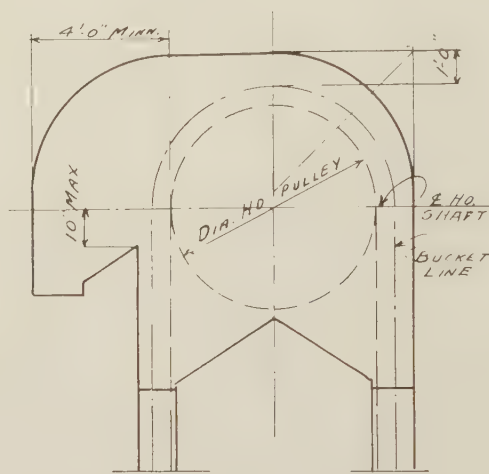
We have had the following factors working to raise commodity prices in this country since the reopening of the banks in 1933: (1) the return of confidence, the rally from an unprecedented crisis; (2) the cost increases under N. R. A. and the crop restrictors under A. A. A.; (3) two years of extraordinary drouth. When all these factors are taken into account, I think that not much remains for the reduction of the gold content of the dollar to explain.

Currency debasement and currency manipulation in general, in a great country, are not quick and sure and automatic methods of raising prices. None the less, over longer periods of time and in ways impossible to forecast with any exactness, the great debasement of the dollar and of other currencies, with the resultant immense increase both in the existing number of gold monetary units and in the number annually added by current production, must work out its result in the form of higher prices for commodities, for real estate and for other equities.

Increasing the Capacity of Your Legs

Improved highways have encouraged the use of larger and larger trucks thus placing the country elevator with small legs at a great disadvantage when the new crop rushes to market.

When country elevators received their grain from horse-drawn vehicles the leg handling 1,000 bus. per hour was considered sufficient,



High Speed Head of Large Capacity.

but with the general use of the motor truck carrying much larger loads this small leg has become obsolete and grain dealers are displacing them with legs of much greater capacity in order that the long line of trucks can be unloaded quickly and cause as little delay as possible to the truck owners.

Increasing the capacities of the legs has caused some worry to elevator owners principally because of the lack of room for additional width of legging occasioned by the greater width of the new cups to be installed. Some elevator owners hesitate to speed up their old legs thirty or forty per cent using a high speed cup.

Many operators think a leg of 2,000 to 2,500 bus. capacity would speed up their receiving facilities and solve their problem. This can easily be accomplished by installing an up-to-date cup that can be put on the belt practically continuous, that is, having the buckets spaced about an inch apart, and this will double the number of buckets on the belt. The increased cubic inch capacity of the more recent type of buckets will more than double the elevating capacity of the leg.

As an instance, we will assume that an operator has a leg using 8x5 cups on a 12 in. belt now elevating 1,000 bus. per hour. Unless the buckets are of the "V" type probably they are spaced about 12 in. centers, and the belt speed is about 400 feet per minute. By using an approved type of continuous buckets and putting them on the belt at 6 in. centers the operator would have no trouble in elevating 2,400 bus. per hour on any type of hard grain and with no trouble from back legging, and this could be further increased by widening the cup to nine or nine and one-half inches on a 10 in. belt.

Illustrated herewith are three typical elevator heads to be used with the newer type of buckets, one of these for wood and one for steel in the average country elevator. The other is for steel casing in a high speed leg. The two first mentioned can be easily remodeled from the present type now used in the country elevators. One point to be considered in changing from 1,000 to 2,500 bushels per hour leg is that the average distributor now in use (probably an 8 in. goose neck type) will not carry the larger amount of grain, although after the grain is properly started an 8 in. spout will take care of it.

A new type of distributor will probably be shown in the next number of the JOURNAL which is larger and gives a practically straight flow of grain from the head. It will be sold at a price not much above the present price of the average distributor. Another point to keep in mind is to see that the leg is permitted to receive this increased amount through the receiving sink into the boot.

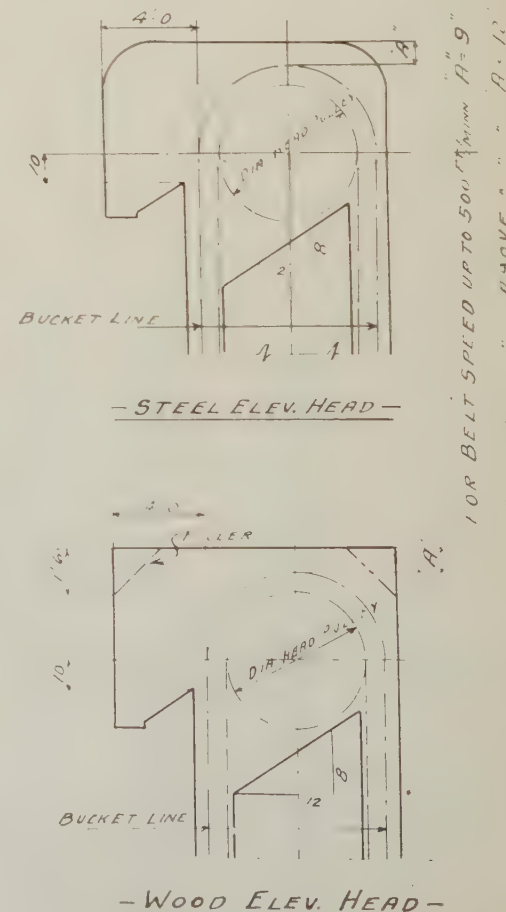
If we assume that the average leg is about seventy-five foot centers and that the owner wants to handle from 2,000 to 2,500 bus. per hour a 7½ H.P. motor would elevate this amount of grain, and while not large enough for a continual run the motor would only be overloaded for short periods. It would be almost impossible in a country elevator to keep this load at this capacity continually so the motor would cool off many times during the day.

It is also recommended that the head pulleys in all legs be lagged to prevent slipping and if both the head and boot pulleys were lagged the fire hazard will be greatly reduced due to the fact that the heads of the bucket bolts at no time are in contact with the metal pulleys.

The elevator operator has always been worried about the cost of making these changes, but practically the only difference would be in buying the new buckets and the distributor, and in some cases trading in his motor for one a little larger. The first cost would be practically nothing compared to the increased business operator would get from the greatly increased receiving capacity of his elevator.

Chicago, Ill.—The semi-annual meeting of the American Corn Millers Federation, originally scheduled for St. Louis, was held at the Morrison Hotel, Chicago, Jan 27-28.

Among the oldest specimens of cereal grains are those discovered at Badari, Egypt, in 1923-24, and at Montagadda, Egypt, in 1928. They are emmer and barley, grown prior to 5,000 B. C., some authorities setting their age at 10,000 to 15,000 B. C.



Elevator Heads for Small Legs.

How to Lose 12 Months' Profit in 3

By MAX P. SELLARS, Forest, Ind., before Indiana Grain Dealers Ass'n

One thing about this noble calling of ours that I could never understand is the reason for the thought, trouble and time so many country elevator operators have taken to devise the best possible and most efficient method of throwing away their profits.

All have heard many talks about how to make money. Let's reverse the matter and see if we cannot find a good, sure-fire way to lose it. The best way to begin is by getting into the country elevator business.

Let's buy ourselves a good, average Indiana country station. We'll pay \$10,000 for it. Now let's buy a truck for \$700 and put \$5,000 in the bank for working capital. We're in the grain business now with \$15,700 invested even if they are fifty-nine cent dollars.

From 1928 to 1933, Professor Hinrichs of the Farm Management Department of Purdue University conducted a study of the income and cost of operation of some twenty-six to forty-eight country stations, and the approximate averages which his study showed will be used in setting up the figures for our venture into the grain business.

Gross Earnings: According to our statistics, the average annual volume of grain for all elevators except those in the heavy surplus grain producing territory of western Indiana, is only 80,000 bushels. Let's do better than that and give our plant a volume of 100,000 bushels with a gross margin of 4c per bushel or \$4,000 for the year's gross profit on grains. (Incidentally, statistics from Purdue show much nearer 3c than 4c as the average.)

Twenty-five cars of coal per year seems to be about the average. That's 1,250 tons at \$1 per ton gross or \$1,250. Feed sales seem to run about \$10,000 at 12½% or \$1,250. Grinding is next in importance at an average of \$100 per month or \$1,200 for the year. Seeds, fertilizer, farm supplies, twine, flour, etc., should gross another \$1,000. Since we own and operate our truck, let's give ourselves the benefit of the doubt and figure that we occasionally get a little revenue from its use. If we haul a third of our annual grain volume at 1c per bushel, we earn \$335, and one-half of our coal tonnage delivered at 50c per ton gives us another \$325. And now, if we haven't made too many mistakes, we find that we have a total gross margin of profit for the year of \$9,360.

Perhaps expense is necessary in the operation of our elevator. First, we need a manager—and we'll need him. Regardless of whether he is the owner, a partner or working for a group of stockholders, his salary is a legitimate charge against the operation of the business. Professor Hinrichs' study was emphatic in its assertion that cheap managers were invariably high priced ones. We don't want to go to extremes, but truly believe that a salary of \$1,800 per year is not too much to spend for this most important position. Maybe we can hire an elevator man for \$20 per week or \$1,040 a year and a truck driver at \$18 or \$936 per year. Extra labor, necessary at peak times, vacation periods, etc., should eat up another \$500 per year.

Our power costs will probably average \$750 for the year, and with good luck, perhaps we can drive our truck 10,000 miles at 3½ cents per mile for gas, oil and tires, or \$350 expense there.

If we trade at the proper time and try to avoid costly repair bills, let's assume that 25% per year for truck depreciation will cover, and set up \$175 for this item.

We have a \$10,000 plant which begins to

depreciate the minute we purchase it and which needs repairs each year to keep it in operating condition. Let's be conservative and set up an amount that contains no hidden profits. If we set up just 7½% per cent per year, or \$750 to cover all repairs and depreciation, we surely haven't exceeded actual costs.

Insurance on buildings and stock will probably cost \$300, with another \$150 for compensation insurance and truck coverage. Miscellaneous, telephone, heat, stationery, etc., should eat up another \$200.

I've heard of elevators losing money on bad accounts, but let's make a good manager out of the fellow we hire and hold him down to \$200 per year.

This brings us down to that relatively unimportant item—taxes. Unless we can fool the assessor—and that's getting hard to do—we will be out \$250 per year for property tax. And until our Indiana Legislature is composed entirely of grain dealers or until it should decide to completely disregard the advice of the Indiana Farm Bureau, we are going to have our good old Indiana Gross Income Tax to pay, and that will cost us about \$350. SSEC is a new baby. Social Security—Unemployment Compensation is her name, but she only costs from \$25 to \$45 this year for Social Security only, depending on whether our manager owns the plant and can exempt his salary. Now add up the figures and we find our operating expense totals \$7,776 and that we have a net profit from operations of \$1,584, or approximately 10% on capital invested.

Our manager, as shown here, made a legitimate salary for himself and earned 10% on his capital invested. Not so bad—and if he can hold out for 50 years or so, maybe his children, after paying their inheritance tax, of course, might have enough left to rent a trailer and get away from it all.

It's about time to get down to our sure-fire plan for losing money. There's plenty of competition in the grain business among legitimate operators, truckers, feeders, etc., but that's no different than we find in any line of business today. I believe that many an elevator man has been justified in going to the country on numerous occasions and overbidding his market, trucking free or horse trading, if, by so doing, he was able to make a dollar on a deal which should have made two dollars, but would not have made anything if he hadn't done it that way.

Our elevator handled 100,000 bushels of grain. When did it handle it? From 3 to 5% came in a single day. From 15 to 18% may have been received in a single week. Actual figures from our own houses show that we receive 65% of our total yearly volume of grain in 90 days' time. This is during the month or six weeks of small grain harvest in the summer and the corn harvest in November and December. With a combine on every other farm and a corn picker in every barn lot, it's quite possible that we may soon be handling two-thirds to three-fourths of our yearly receipts in little more than 60 days' time.

When is the time in which the grain trade has its least competition from sources other than within itself? It's during this 60 to 90 day period. Feeders are harvesting their own crops and are not out scouring the country for additional supplies. Local truckers have fewer farmers wanting to buy loads of grain and truckers from non-producing territory who give us so much trouble are obtaining their supplies, for the moment, close to home. It's a fairly safe bet that the market for grain,

Capital Invested	
Country elevator	\$10,000
Truck	700
Working capital	5,000
Total investment	\$15,700
GROSS EARNINGS:	
100,000 bus. grain at 4c per bu.	\$4,000
25 cars (1,250 tons) coal at \$1.	1,250
\$10,000 feed sales at 12½%	1,250
Grinding at \$100 per month	1,200
Seeds, twine and other mdse.	1,000
Trucking grain and coal	660
Gross income	\$9,360
OPERATING EXPENSE:	
Manager's salary	\$1,800
Elev. man's salary	1,040
Truck driver's salary	936
Casual labor	500
Power	750
10,000 miles truck operation @ 3½c.	350
Truck depreciation	175
Elevator depreciation and repairs @ 1½%	750
Insurance on plant	300
Insurance on truck	150
Misc. office expense	200
Bad accounts	200
Property taxes	250
Gross income tax	350
Social security tax	25
Net profit	\$7,776
Cost of season's fight	1,300
Net remaining	\$ 284

during this period, is made by the country elevator.

About this time, old Bill Raisenhel of the Up & Atom Grain Co., over at Skinnum Station gets the bellyache, decides to play Santa Claus or thinks that he isn't getting all the grain to which he is entitled and so he boosts the price a couple of cents. Such news, during harvest time, travels at the rate of at least a mile a minute so that in less than a quarter of an hour his neighboring competition is paying the same price. Bill still gets his usual volume of grain. But the ball rolls merrily onward and don't dodge our own pride and joy as it comes along.

We too, raise our price 2c per bushel—and what happens? If it occurs only on our biggest day of the year, we lose \$100, if it lasts all thru our biggest week, we lose \$300 to \$500, and if Bill's bellyache don't get better, if it lasts thruout the three months of our heavy volume we lose 65,000 times 2 cts or \$1,300 and that, deducted from our net of \$1,584, leaves just \$284 and a headache, or a nice 1.8% on our capital investment. Then we advise our children to forget the trailer and apply for work on the WPA.

An elevator is open for business 12 months in the year. Nine of those months are filled with normal, routine transactions with our trucker and feeder competition at its height but with no great peaks of activity. If necessary, doesn't that period furnish time enough for a man to work off his excess steam, do his sniping, skulduggery, horse trading and get the devilment out of his system? So that when the three months come—those months in which he handles 65% of his total yearly grain volume—he is content to fulfill the purpose for which he serves his community, namely, that of providing a convenient market to the producer of grain in that community at a price fair to the producer and to himself.

Don't you think that too many of us get the bellyache during the wrong three months of the year? Isn't that the best and most efficient method for losing 12 months' profit in three? But here's the hard one—can you tell me *why* we do it?

Over \$500,000,000 have been loaned to farmers thru the cooperative production credit system organized under the Farm Credit Administration less than three years ago, says W. I. Myers, in charge of the division. The average loan has been \$870. In dollar volume the Pacific Northwest has been the largest borrower (\$93,000,000), the Pacific Southwest the second largest.

Interesting Program Attracts Record Attendance at Hoosier Meeting

A legislative plan for regulation of itinerant merchant truckers, unemployment compensation laws, the Robinson-Patman Act, and minerals in feeds were prominent subjects in a well balanced program before the 36th annual convention of the Indiana Grain Dealers Ass'n, held in the library of the Indianapolis Board of Trade, Tuesday and Wednesday, January 19 and 20.

Tuesday morning found almost 400 delegates crowding the registration desk where attractive identification badges were supplied by the Grain Dealers National Mutual Fire Insurance Co.

Every business session found the hall jammed, and nearly 500 attended the annual banquet.

Tuesday Morning Session

PRES. G. A. PRITCHARD, Fortville, presided at the opening session Tuesday morning.

WALTER R. BECK, Shelbyville, vigorously led community singing that brought all stragglers into the meeting room.

WM. L. O'CONNOR, pres. Indianapolis Board of Trade, expressed pleasure at the big attendance in his welcoming address. Calling attention to marked increases in the volume of Indianapolis grain receipts during 1936, he looked forward to bigger and better grain crops, and further increases in Indianapolis trade during 1937.

G. B. MCBANE, Maxwell, responded for the ass'n.

R. C. SMITH, Indianapolis, chief auditor for Indiana's Unemployment Compensation Division, explained state and federal unemployment compensation laws, which he termed "compulsory insurance against insecurity." His address is reviewed elsewhere.

A rapid fire of questions found Mr. Smith answering that employers of fewer than eight employees do not come under the law; employees who work less than 20 weeks in 52 are not entitled to benefits; any wages, however small, for regular employees are subject to the unemployment tax; employing casual labor on a contract basis eliminates the employer-employee relationship and so escapes the law.

PRES. PRITCHARD remarked that no special forms are required by the state unemployment compensation law for the keeping of required records, but a number of satisfactory forms have been made available by various printing houses. Leading into his annual address, Pres. Pritchard continued:

President Pritchard's Annual Address

Two years ago, when you honored me with the presidency, we were confronted with codes and the NRA. Today it is the Robinson-Patman law, the social security, federal and state, and the gross income tax.

We are taxed if we do and taxed if we don't, and I wonder how long it will be before we are all on pensions without any businessmen left to pay us ours. Only one thing is left to do—keep pulling on the oars, head our boat into the wind and keep it there. Sooner or later the wind will lay and we will have easier going. We have had too much experience keeping our business ships from upsetting while going through the roughest depression this country has ever experienced to let a few extra taxes get us down. Stay with it! You are in an honorable business rendering a great service to agriculture and rendering that service at less cost than is possible by any other method.

Terminal market men are working diligently to find better outlets for our grain and striving zealously at all times to sell our grain for the highest possible price. At times we feel they should have sold at a half cent, or even a cent, more, but if we check each transaction we will find that our grain is always sold in line with the market.

Many Indiana country elevator operators are not members of this ass'n. In unity there is strength and, I believe, greater wisdom. The benefits of our membership will be mutual.

I wish to commend our secretary, Fred Sale, for the able assistance he has given me the past two years. It has been a pleasure to work with him. Mr. Sale and Miss True are valuable assets to our association.

I thank you sincerely for having honored me as your president. I appreciate your cooperation for these past two years. To the new president, and to all members, I wish you health, happiness and success in the years to come.

SEC'Y FRED K. SALE, Indianapolis, presented his annual report, saying:

Sec'y Sale's Report

Prices of grain, feed, coal and other sidelines have increased materially in the last six months. Many firms acknowledge with satisfaction that their profits were greater during 1936 than at any time in the last eight or ten years. Our corn and soy bean crops, which at first appeared to be exceedingly short, came out much better than expected. There is every reason to look forward to increased profits in 1937.

Many in the grain, feed and milling business have not secured during the last couple years a fair and reasonable margin of profit on their grain and sideline commodities. Particularly has this been true this last calendar year, when values were enhanced from 20 to 50%. Your margins are still on the basis of the low prices. It is time to check up on this condition and adjust margins to present values. Don't overlook the increase in taxes and wages. You now contribute to the Social Security Acts, and operating expenses and repairs are on the up-grade. Isn't it time right now to widen your margins? I am making no pretense of telling you how to operate your business, but in the spirit of helpfulness am suggesting that you observe these things and to take steps to enable your business to show increasing profits.

By direction of the Board of Managers, I attended a conference at Kansas City where representatives of grain dealers from some eight southwestern states came together to perfect an organization to regulate the itinerant truckers on our highways.

Through arrangement instituted by our ass'n, and with the cooperation of Purdue University, Prof. F. E. Robbins and representatives from the Federal Grain Supervisor's office in Chicago, a grain grading school was held at Lafayette on March 18-19. This proved profitable to 75 men and 3 women who registered for the course. Practical instruction was given in proper methods of grading, weighing and testing for moisture of wheat, oats, corn and soybeans, "pupils" individually making their own tests on samples furnished them. This school was so popular that our ass'n is considering holding similar schools at three or four points in the state during 1937.

Outstanding of our accomplishments during the last year was our success in preventing the Gross Income Tax Division from collecting tax on interstate shipments of grain. A test case instituted last March grew to a test of this tax on five different cases involving interstate movement of grain. A prominent attorney, familiar with the grain business, successfully defended our cause. Had we been unsuccessful, the trade would have been compelled to pay the gross income tax on every car of grain shipped out of the state back to May, 1933. The amount of savings to Indiana's grain trade thru our successful prosecution of these cases is a matter of guess, but it is reasonable to assume that it would have totaled many thousands of dollars. The amount saved each of you will pay your dues to the ass'n for several years. This clearly illustrates the necessity for the Indiana Grain Dealers Ass'n and justifies your membership and support. Had it not been for your ass'n, quick to challenge arbitrary rulings of the Division, no opposition would likely have been assumed by anyone, and you would have paid the tax, not only for the past three years, but so long as the gross income tax may exist. Here is a splendid example of what can be accomplished by a strong, live organization.

I am happy that our ass'n continues to grow in numbers and in strength. Today our membership totals 441, a net increase of 16 over a year ago. During the year 47 new members have been added to our roster. Credit goes to the following members on the Honor Roll for

1936: Lew Hill, C. G. Egly and President Pritchard take equal honors for first position, each securing three members. W. S. Wisheart obtained two. O. L. Barr, Avon Burk, Eugene Floyd, B. I. Holser, Ben Levy, Lloyd R. Rumsyre, Ivan Syler and George C. Thomas contributed one new member each. The balance were obtained by your Secretary. I hope at our 1938 meeting we shall be able to report a total membership of an even 500.

Deaths: In the last year nine members have been claimed by death. They are: Henry Leimgruber, Tell City; Ora A. Williams, Winamac; Everett Revele, Lebanon; Peter Gettler, Dyer; John F. Kunberger, Columbia City; Nelson D. Bishop, Indianapolis; Shirl Herr, Crawfordsville; H. Lee Early, Cincinnati, O., and Wm. E. McBane, Fortville.

The members have paid up exceedingly well and promptly, which has been very helpful. The response for dues covering the current six months has been most gratifying; in fact, my record indicates 75 per cent have already paid.

Income Tax: Your pres. and I represented the ass'n at the two-day conference, Dec. 10-11, called by Governor Townsend to hear complaints of groups under the Gross Income Tax law. Our association joined with practically all other retailing groups and urged horizontal reduction of the retail tax to one-quarter of 1%. A tax com'te appointed to review the complaints, supposedly for the purpose of suggesting changes in the law, includes our own President Pritchard.

HAROLD L. GRAY, Crawfordsville, reported for his transportation com'te, saying:

Transportation Com'te Report

Freight loadings are on the upward trend. Revenue loadings were 30 million cars in 1934, 31 million in 1935, and 35 million in 1936.

Scattered demand all over the railroad network for new trans-it rates and the establishment of better local rates shows that competition is growing keener every day. But were it not for the thousands of trucks, hauling an enormous tonnage, at lower rates now than by rail, the railroads would be allowed to raise their rates regardless of whether the traffic could bear it or not.

Emergency rates were discontinued Dec. 31, but the Commission reopened the case (Ex Parte No. 115) to study new facts. This hearing started Jan. 6 and is now in progress. The railroads are adding volumes of argument to get emergency charges made permanent, regardless of truck competition.

If the six-hour day for railroad employees becomes a law, freight costs necessarily must be higher.

The "Motor Act, 1935" has been working under serious difficulties. Molding of its rules, regulations, rates and government is taking the procedure worked out over many years by the railroads. In a few months, rules of safety, Surety Bonds, Insurance, Bills of Lading, Expense, Hours, Tariffs, Uniformity of Service, Rates, and every detail must carefully and systematically be carried out. The near future will see stricter regulation for all motor carriers than could ever be realized at the start.

Nevertheless, many unregulated forms of trucking are demoralizing the established trucking industry which is subjected to the extra cost of governmental regulation, while the itinerant pays only such taxes as he cannot escape.

Rail pick-up and delivery service is proving a great service to shippers. Some railroads have 20% minimum, and others higher. Several are asking for 45%. It will be to our advantage to help hold the 20%.

Adjourned to 1:15 p. m.

Tuesday Afternoon Session

PRES. PRITCHARD presided at the second session, opening with community singing led by Walter Beck.

PAUL FISHBACK, sec'y National Food Brokers Ass'n, Indianapolis, reviewed the Robinson-Patman Act, explaining its anti-price discrimination features. Said Mr. Fishback:

"Any consideration of the new law should start with its purpose as defined by the House Com'te on the Judiciary, which said in its report to the House: 'It is the design and intent of this bill to strengthen existing anti-trust laws, prevent unfair price discriminations, and preserve competition in interstate commerce. It is believed to be in the interest of producer, consumer and distributor. No business institution need have any fear of this legislation, if it will conduct its business honestly, and without the use of unfair

trade practices, and unjust price discriminations.

"Every business man knows when he is conducting his business honestly. He knows when he is discriminating in price, because discrimination in price simply means giving a preferred customer a better or lower price or terms or discounts than is at the same time being given to the competitors of that customer.

"Industry should make up its mind now to live with this law. It does not impose impossible restrictions. It merely insists upon fair dealing with all customers, giving the vast majority of the little men in business an opportunity to exist, by permitting them an even start with the big fellows, so that their initiative, enterprise and merchandising activity will earn them their proper place."

TREAS. R. B. McCONNELL'S report showed the ass'n's finances to be in good order, and report was approved.

JAMES F. TREASURE, Muncie, extension worker and vocational teacher, exhibited a simple device for treating sacks of seed grain with formaldehyde to kill smuts and other forms of plant disease. The device consisted of a heavy glass cup bearing measuring marks, and a spike tipped metal cover. Into the cup is first placed the proper quantity of permanganate. On top of the permanganate is poured a measured quantity of formaldehyde. Then the cover is placed on the cup and on top of the device is set the sack of grain to be fumigated, the spike tip of the cover piercing the bag and allowing a free flow of fumigating gases to work their way around the grain.

"Treated grain," said Mr. Treasure, "is always better than untreated grain for seed. Tests have shown treatment of seed grain increases yields from one to one and one-half bus. per acre."

E. E. CLORE, Greenwood, explained the part minerals play in maintaining the health of poultry and livestock. "Minerals," said Dr. Clore, "must be balanced as carefully as any feed formula, and in turn must be balanced as a part of the ration, if they are to accomplish their purpose in the system of the consuming bird or animal. The compounding of mineral feeds is a job for an expert." His

address is reviewed in the feed department of this issue.

RAY B. BOWDEN, St. Louis, executive vice-pres. of the Grain & Feed Dealers National Ass'n, talked about "Free Men in a Boat," explaining that grain men are all in the same boat from the legislative standpoint, but each is still a free man. By group action grain dealers can correct their troubles. In foreign countries the grain trade started group action 20 years too late, and suffered loss of freedom.

"Business," said Mr. Bowden, "is no longer local. Its centers are at the terminal markets, or in political capitals, where rules and restrictions are brewed."

R. D. MacDANIEL of the Grain Dealers Mutual Fire Insurance Co., showed "Dangerous Dusts," a sound picture, furnished by the U. S. Department of Agriculture. The picture graphically portrayed the explosion that follows when a spark touches off highly explosive mixtures of air and dust in confined places; the damage done to grain elevators by a dust explosion, and the experiments conducted by the U. S. Department of Agriculture in studying dust explosions.

PRES. PRITCHARD appointed the following committees:

NOMINATING: O. L. Barr, Bicknell, chairman; Max Sellars, Forest; F. R. Garver, Boggstown; Lee Evans, Remington; Walter M. Moore, Covington.

RESOLUTIONS: Harold L. Gray, Crawfordsville, chairman; F. A. Dahl, Lowell; J. D. Kiefer, Elwood; Lee Carl, Remington; M. E. Kendall, Carmel.

Adjourned to Wednesday morning.

The Hoosier Banquet

The annual banquet was held in the Columbia Club Tuesday evening, Jan. 19. Gas filled balloons strained at threads from every plate, and on each chair a colorful paper hat was ready to brighten the festive occasion.

Herbert Petrie and his White Hussars gave a brilliant presentation of wind instrument music while the last diners finished their ice cream.

Paul Barker and his dance orchestra furnished dance music at the close of the White

Hussars' program, and kept the floor crowded until midnight.

Wednesday Morning Session

PRES. PRITCHARD presided at the third session.

MAX P. SELLARS, Forest, explained the simplest and commonest method employed by country grain dealers to lose 12 months' profit in three months. The method consists of getting over-bidding fever at the height of the grain movement. In his explanation Mr. Sellars gave an intimate picture of volume of business, required investments, business practices, and other factors in elevator management, setting up a standard for the benefit of his fellows. His address is published elsewhere in this issue.

W. R. SCOTT, Kansas City, executive vice-pres. Associated Southwest Country Elevators, reviewed present plans of his organization for building up the costs for "elevators on wheels," as he termed itinerant merchant trucks, until these costs are comparable and competitive with the costs of regularly established elevators.

"At the close of the last crop season," explained Mr. Scott, "the trade at Kansas City found it had handled only 25% of the corn business between the source of supply in northwestern Iowa, and the consuming sections in Missouri, Arkansas and Kansas, altho Kansas City is directly in the line of haul for most of this trade. Itinerant merchant truckers handled 75% of the business."

"Every attempt of the grain trade to get satisfactory competitive rail rates on grain has failed. The Motor Carrier Act is no help on this problem, which is concerned with a class of trucker exempt from the Act."

"The Associated Southwest Country Elevators have joined forces with the lumbermen, the coal dealers, the fruit jobbers, and others, to build up the costs of the itinerants."

"Influential representation in practically every state capital in the eight southwestern states included under the plan have been established; a model bill has been drawn up and adapted for presentation to the legislatures of each of these states."

"Contemplated in the proposed legislation for each state is registration so that trucks can be quickly located when any efforts to commit trade crimes are made by their owners; uniform and higher license fees; a tax for the privilege of doing business similar to the occupational tax; giving of bond to protect those with whom the trucks do business from trade malpractices."

"These bills propose to treat the itinerant trucker as a merchant. Contemplated in further legislation is also planned a ton mile tax, which considers the state owned highways as a part of the equipment used by the trucker and taxes him accordingly. Also under consideration are such safety factors as a limit to the hours of labor for drivers, limits to the length and weight of loaded trucks, periodic inspections of brakes, tires and other equipment."

W. D. SPRINGER, Indianapolis, said: "I wonder if the cure isn't worse than the disease. I am prejudiced against any form of government in business. From legislation against the truckers may come strangulation of the industry instead of regulation. The troubles of the railroads have their origin in over-regulation. With legislation to regulate the trucks we create more government bodies to grow and become a tax burden."

MR. SCOTT: "Nowhere have I seen any real effort being made to remove restrictions and regulation from business, or from our railroads. Regulation is in the air. Why should we leave one element free while another is heavily burdened?"

FRANK YEOMAN, Hanna: "Over some sections of our highways the gasoline taxes paid by trucks would be enough to completely

New Officers and Directors Indiana Grain Dealers Ass'n



Front row, l. to r.: Vice-pres. C. G. Egly, Fort Wayne; Pres. C. C. Barnes, Winchester; Retiring pres. and director-elect G. A. Pritchard, Fortville; Sec'y Fred K. Sale, Indianapolis.
Back row, l. to r.: Directors: Lew Hill, Indianapolis; Wallace B. Springer, New Lebanon; L. E. Lake, Colfax; Walter Penrod, South Whitley; L. E. Greenwood, Rensselaer.

rebuild the highways every year. What we grain dealers need is to regulate ourselves. What we need is less over bidding, less reaching into the territory of our competitors and offering free trucking service to get the grain."

WILLIAM H. CURRY, Tipton, winner of the title "Corn King," for the third time at the last International Hay & Grain Show, talked briefly, saying: "Today's winners at the International Show must show smoother varieties of yellow dent corns to win. The new varieties have small cobs, long kernels. They mature early and shell out well to the delight of the grain dealers. Smooth corn is more satisfactory for feed. Cattle and hogs like it better."

The Resolutions Com'te reported the following resolutions, which were unanimously adopted:

Resolutions Adopted

MEMBERSHIP

WHEREAS there is an increasing need for a stronger state and National organization to assert influence in impending legislature and other kindred issues both state and national, and

WHEREAS, the membership owes a debt of gratitude to the past and present officials for their untiring efforts in building up our organization, be it

RESOLVED that each member make an honest effort to secure at least one new member during 1937 and that we set a goal of 500 members for our ass'n by Jan. 1, 1938.

PRIVATE INITIATIVE

WHEREAS, private initiative in the United States has been so successful without Governmental interference in producing visible wealth, be it

RESOLVED that this ass'n once more go on record as opposed to the Government engaging further in any line of business. We believe that the function of the Government is still to govern and that a more abundant business is to be attained when left to the individual citizen.

GRAIN SALES

RESOLVED that the Indiana Grain Dealers Ass'n favors a reclassification of proceeds from the sales of grain to a gross profit basis.

ELECTION placed the following officers for the ensuing year: Claude C. Barnes, Winchester, pres.; C. G. Egly, Fort Wayne, vice-pres.; R. B. McConnel, Indianapolis, treas. Directors: G. A. Pritchard, Fortville; Walter Penrod, South Whitley; Walter R. Beck, Shelbyville; Wallace B. Springer, New Lebanon. Holdover directors are: Lew Hill, Indianapolis; D. B. Jenkins, Noblesville; L. E. Lake, Colfax; L. E. Greenwood, Rensselaer.

Albert A. Kuhle, Indianapolis, director of the Buro of Old Age Benefits, reviewed federal old age benefits, and the method of taxing for this purpose.

"See that your employes, even casual labor, have an account number. You are required to report their wages. Only by having wages reported and deductions credited to the proper account number, can the employe receive his benefits.

"It is contemplated by the Social Security Board," continued Mr. Kuhle, "that the Act will be broadened to include farm help and other classes of labor which do not now come under the Act."

Adjourned *sine die*.

Convention Notes

OPEN HOUSE was held by every Board of Trade grain office for the duration of the convention. On every desk was a plentiful supply of cigars and cigarettes. Pencils and polished apples were plentiful in the Cleveland Grain Co. office. Candy was a variation in the McEwan-Butturff Grain Co. office.

LADIES at the convention numbered close to 80. Most of them enjoyed the premiere Indianapolis performance of Shakespeare's immortal "Romeo and Juliet," at Lowe's theater, Tuesday afternoon. Reserved tickets were supplied free at the registration desk. Wednesday morning those ladies with the hearts of shoppers enjoyed a personally conducted sight-

seeing trip thru the William H. Block Company's newest and finest department store.

Attendance at Hoosier Meeting

BUFFALO, N. Y., sent John N. Anderson; Detroit, Mich., W. D. Pitt.

MERCHANDISE salesmen included George Baxter, wire; L. R. Rumsyre, twine.

ASS'N SEC'YS present included R. B. Bowden, executive vice-pres. of the Grain & Feed Dealers National Ass'n, and W. E. Culbertson, Illinois Grain Dealers Ass'n.

INDIANA interior brokers of grain and feed were S. J. Alexander, Crawfordsville; E. E. Adamson, Hagerstown; C. G. Egly, Fort Wayne.

OHIO representatives were F. E. Watkins, Cleveland; Joe P. Lackey, and Richard C. Molter, Toledo.

ILLINOIS sent W. W. Means and Ralph Cassidy, Paris, and W. C. McMichael, Lawrenceville.

MACHINERY salesmen included E. D. Bargery, Union Iron Works; Cliff Gottman, Prater Pulverizer Co.; W. W. Pearson, McMillin truck lifts; E. Ripley, Fairbanks, Morse & Co.

LOUISVILLE, Ky., sent Clark Yager, Harry A. Volz, Henry Fruechtenicht, C. G. Ferguson.

MUTUAL INSURANCE was represented by A. E. Leif, R. D. MacDaniel and H. W. Marsh, Grain Dealers Mutual Fire Insurance Co.; V. L. Parmentier and H. H. Hawlick, Millers National Insurance Co.

SEEDSMEN were H. D. Burge and A. D. Warren, Indianapolis; T. C. Crabbs and G. R. Straub (Crabbs, Reynolds, Taylor Co.); Ed Flanagan and T. H. Beeson, Crawfordsville; Gene Floyd, Chicago; Guy F. Davis, Lebanon; D. S. Foster and C. C. Major, Carmel.

FERTILIZER manufacturers and salesmen present included H. K. Volkerding, Fred Schmidt, John Shearer, Charles Rush, Herbert Darr, J. A. Durman, W. J. Grayson.

FEED, salt, cod liver oil and soybean mill representatives were Jesse Young, Lafayette; R. W. Wallace, Decatur; John H. Caldwell, Marion; E. E. Clore, and L. E. Van Divier, Greenwood; Herbert H. Edwards, Bloomington; J. J. Bauer, Wadsworth (O.); R. J. Kingsley, Harrison, N. J.; A. F. Leathers, Chicago.

FROM THE CHICAGO market came John J. Coffman and Jesse H. Summers, E. W. Bailey & Co.; D. W. Jones, Lowell Hoit & Co.; F. F. Thompson, K. B. Pierce, and Morris W. Champion of James E. Bennett & Co.; George E. Booth and William Tucker, Lamson Bros. & Co.; Eugene F. Havey and O. J. Bader, F. S. Lewis & Co.; Harvey Williams and F. M. Muller, Harris, Upham & Co.; James P. Ryan, and Geo. L. Stubbins.

Indiana country shippers present included: Charles S. Anderson, Stockwell; Fred Antell, Princeton; W. D. Adams, Elizabethtown; Carl Applegate, Winamac; C. L. Aukerman, Amboy; Geo. L. Arnold, Poneto; W. H. Alman, Leroy; Frank Ackels, Hobbs; S. J. Brown, Richmond; F. W. Blanton, Claytown; R. W. Brown, Carlos; Sim Burk, Decatur; W. E. Beechdol, Walton; C. R. Bahler, Galveston; C. W. Beck, Shelbyville.

Claude Barnes, Winchester; R. A. Burris, Mulberry; O. L. Barr, Bicknell; John Blish, Seymour; J. J. Batchlor, Sharpesville; John M. Brattain, Hemlock; S. J. Brown, Valparaiso; L. S. Conaroe, Frankfort; Emery R. Chase, Goldsmith; Roy Camp, Monticello; Frances E. Cartwright, Honey Creek; Leon Cheadle, Brems (Knox p.o.).

Wayne J. Cox, Rosedale; Lee Carl, Remington; Charles Clark, Kempton; Frank A. Clements, Economy; M. H. Childers, Terhune; E. E. Clark, Lebanon; S. C. Corkins, New Palestine; Royal D. Clapp, Columbia City; Raymond Carman, Fountain City; L. F. Clupper, Rich Valley; L. C. Compton, Boggstown; K. B. Cook, Zionsville; F. A. Dahl, Lowell; Russell M. Davis, Tipton; H. Dickey, Parker; W. A. Darnall, Coatsville; Albert Egly and Adam Egly, Geneva; E. E. Elliott, Muncie; Noble Engleman, Windfall; Walter Edwards, Mooresville; D. M. Elliott,

Fountain City; Bud Etchison, Frankton; Lee Evans, Remington; Walter G. Einspahr, North Hayden.

Wade Fair, Dayton; Tom Frantz, Reagan; G. L. Fisher, Maplewood; A. M. Ford, Yeddo; J. C. Fitzgerald, Stockwell; John Floyd, Monroe; Harold Ferrin, Carmel; Glenn Gartin, Converse; R. M. Geabes, Clay City; P. E. Goodrich, Winchester; Harold Gray, Crawfordsville; Miles Gooding, Frankton; F. R. Garver, Boggstown; L. E. Greenwood, Rensselaer; Otto Howe, Greensburg; John M. Holder, Clifford; John Herr, Lebanon; J. W. Hubbard, Monrovia; J. M. Hanna, Willow Branch; A. N. Hudson, Kitchell; C. C. Harlan, Kentland; Jessie Mae Helm, Warren; J. R. Holland, Frankton; W. F. Hagen, Chalmers; E. Hutchinson, Arlington; Cyrus Harter, Honey Creek; W. E. Hutton and H. E. Hutton, Vincennes.

John Jackson, Hagerstown; J. T. Jeffers, Lyons; C. B. Jenkins and Don B. Jenkins, Noblesville; J. C. Kashner, Thorntown; John D. Kiefer and Jerry Kiefer, Elwood; M. E. Kendall, Carmel; Francis Knecht, Hartford City; Clyde Keys, Fortville; J. E. Lynch, Darlington; Etna Lefforge, Amo; R. W. Lockwood, Keystone; L. E. Lake, Colfax; Baxter McBane, McCordsville; H. A. McVey, Atlanta; E. L. McDowell, Otterbein; T. A. McCoy, Liberty; Hugh McCorkle, Flora; G. B. McBane, Fortville; Fred McCord, Frankton; Mrs. Massie, Boston; Howard C. Myers, Crawfordsville; O. Meredith, Burkett; Harley E. Miller, Bainbridge; Hugh M. Mattix, Frankfort; J. C. F. Martin, Sweetser; Roy L. Mossburg, Warren; V. W. Moore, Kirkland; Delbert Musselman, Barnettville; A. B. Martin, Lafontaine; Howard Mutz, Edenburg; E. J. Mendenhall, Sheridan; Ed Montgomery, Hemlock; W. M. Moore, Covington; Floyd Myers, Crown Point.

C. L. Northlane, Union City; Ralph Overman, McCrowsville; W. R. Owens, Montmorenci; Walter Penrod, South Whitley; C. Q. Palmer, Logansport; Verl E. Pierce, Mooreland; A. J. Painter, Honey Creek; G. A. Pritchard, Fortville; J. Frank Russell, Greensburg; H. O. Rice, Huntington; Frank Richards, Taylorsville; Charles F. Reeves, Charlottesvile.

J. L. Slaughter, Markleville; M. L. Stanley, Honey Creek; A. W. Snyder, Bluffton; K. M. Sowers, Cicero; Ura Seeger, Marshfield; F. M. Sabo, Linton; A. D. Shirley, Walton; Paul Strock, Hudson; E. R. Steward, Spencerville; D. P. Simison and David Simison, Romney; George Stout, Carmel; Wm. Steeb, Crown Point; K. M. Snyder, Bluffton; C. F. Shaefer and C. L. Shuman, Logansport; Victor Stuckey, Berne; Charles Smallwood, Lafontaine; Wallace B. Springer, New Lebanon; Ralph H. Schinbeckler, Raber (Columbia City p.o.); Ralph Snyder, Taylorsville; Ray Skinner, Stockwell; C. W. Sievers, Peabody (Columbia City p.o.); Herbert Skehan and Ralph Skehan, Alexandria; Don Smith, Cambridge City; Max Sellars and Frank Sellars, Forest; Raymond Shine, New Albany.

A. O. Thomas, Marion; Rhual Tompkins, Frankfort; H. G. Tyler, Lowell; Harold Tharp, Economy; C. M. Urschel, Tippecanoe; C. E. Van Steenbergh, Hoyleston; Taylor Wyatt, Sheridan; L. L. Wallace, Sheridan; O. D. Way, Liberty Center; Oris H. Wright, Vincennes; Russell Wilson, Rochester; P. J. Wolfgram, Brownsburg; M. Worl, Kennard; Roscoe Walter, Spencerville; Ross Wise, Franklin; Joe White, Bluffton; Carl Wilson, Sulphur Springs; J. R. White, Shideler; Garth Woodward, Tocsin; N. A. Wall, Pittsboro; F. L. Yeoman, Hanna.

The North Dakota State Mill & Elevator during the fiscal year ending June 30 had a deficit of \$29,859.93 in the elevator department, \$8,933.65 in the feed mill department, and a deficit of \$353,809.26 in the milling department. The enterprise continues to be a valuable example of the folly of government venturing into business in competition with its taxpaying citizens.

Should the world disappearance be the same during the 1933-34 period, our carry-in stocks for the world in 1937 would be only 312 million bushels. In considering the world wheat needs for the 1936-37 year, it is also well to remember that the rye crop this year approximately only 913 million bushels (preliminary estimate) compared with 976 million bushels in 1935, 942 million in 1934 and 1,052 million in 1933. In view of the moisture situation in our own Northwest and Canada at the present time, as well as the narrow margin between supplies and requirements, we believe that wheat is still cheap, and that much higher prices will be seen before we enter the 1937 year (July 1st), even should indications this spring point to a U. S. wheat crop in excess of 800 million bushels.—E. H. Miller of Shields & Co.

Michigan Bean Ruling Undisturbed

In the briefest regular midwinter meeting on record the members of the Michigan Bean Shippers Ass'n, at Saginaw, on Dec. 29 left undisturbed their ass'n ruling that moisture content allowance in beans after Jan. 1 should not exceed 18 per cent.

Agitation advocating extension of the 19 per cent moisture content allowance until Mar. 1, instead of Jan. 1, which caused the meeting to be called six weeks early, met with no support before the assembly, consequently no change was made in the rules.

Pres. Herbert J. Smith, Elsie, presided at the business session, the luncheon and the amusements that followed. An enjoyable dinner and entertainment was supplied thru courtesy of Flack-Pennell Supply Co., A. T. Ferrell & Co., Frutchey Bean Co., Hart Bros., Michigan Bean Co., Charles Wolohan Co., and others.

Agitators Paralyzing Trade

I have every sympathy for the workingmen. I am one myself. It is right that they should be treated fairly in all respects and should have the right of collective bargaining, but it is not right that collective bargaining should carry the privilege of destroying property, paralyzing transportation and trade, and even endangering human lives.

Men should have the privilege of joining the union of their choice if they so desire; but they should not be compelled to do so under threat of being taken from their jobs and beaten into insensibility. These methods are foreign to our standards of free American citizenship; and if we continue to allow them to be practiced, they will eventually lead to a condition of chaos that will destroy the very foundation of our government. They should be stopped.

It is a crying shame that a small group of communistic agitators should be allowed to so dominate things that our farmers and business

men cannot reap the normal returns from their own efforts. It is unfair, unjust and un-American.—W. B. Roby, pres. California Hay, Grain & Feed Dealers Ass'n.

Increase in Inspection Points

After the enactment of the Grain Standards Act the federal government found an inspection system organized ready to hand composed of state and exchange grain inspectors, on whom federal licenses were conferred.

At that time prior to Sept. 15, 1917, there were about 75 inspection points in the entire country, distributed as now in the grain territory. This number has now more than doubled, there being about 165 inspection points at present, and on July 1, 1936, there were 400 inspectors licensed.

Oklahoma then had one inspection point, now the state has five more.

Texas had only two inspection points, Galveston and Fort Worth; now there are ten, and licensed inspectors are located at 14 points, operating under the two supervision districts in that large state having headquarters at Fort Worth and Galveston.

New York Produce Exchange inspectors operate at points as far separated as Norfolk, Va., and Erie, Pa.

Kansas alone has 14 inspection points, nine of them being district headquarters.

The general field headquarters of the federal grain supervision are at Chicago, where also is the board of review appointed to pass on appeal certificates issued by supervisors, in the cases where objection has been filed.

The federal grain supervision has 40 offices, including the general field headquarters at Chicago, and the Pacific Coast headquarters at Portland, Ore.

Wisconsin's 11 codes have been knocked out by the injunction granted by the federal court restraining enforcement of the state N. R. A. attacked by the Unity Dye Works of Milwaukee for price fixing. The court held the Wisconsin N. R. A. unconstitutional.

New Concrete Annex to Weschler's Elevator at Milwaukee

The reinforced concrete elevator of the D. D. Weschler & Sons, Inc., at Milwaukee, Wis., has been enlarged by the building of another annex so that it now has room for nearly a million bushels of barley. The latest addition consists of 12 bins 21 ft. in diameter by 87 ft. deep and interspaces increasing the storage room of the plant nearly 350,000 bus.

The original elevator and working house was built by the Macdonald Engineering Co. in 1909, and it must have been a good job, because the bin walls are in just as good condition as anything being built today. The only deterioration has been in plastered walls supported by structural steel, which, in the intervening 27 years have shown some cracking. This explains the black streaks in the cupola of the old elevator, but the monolithic concrete work is still a perfect job.

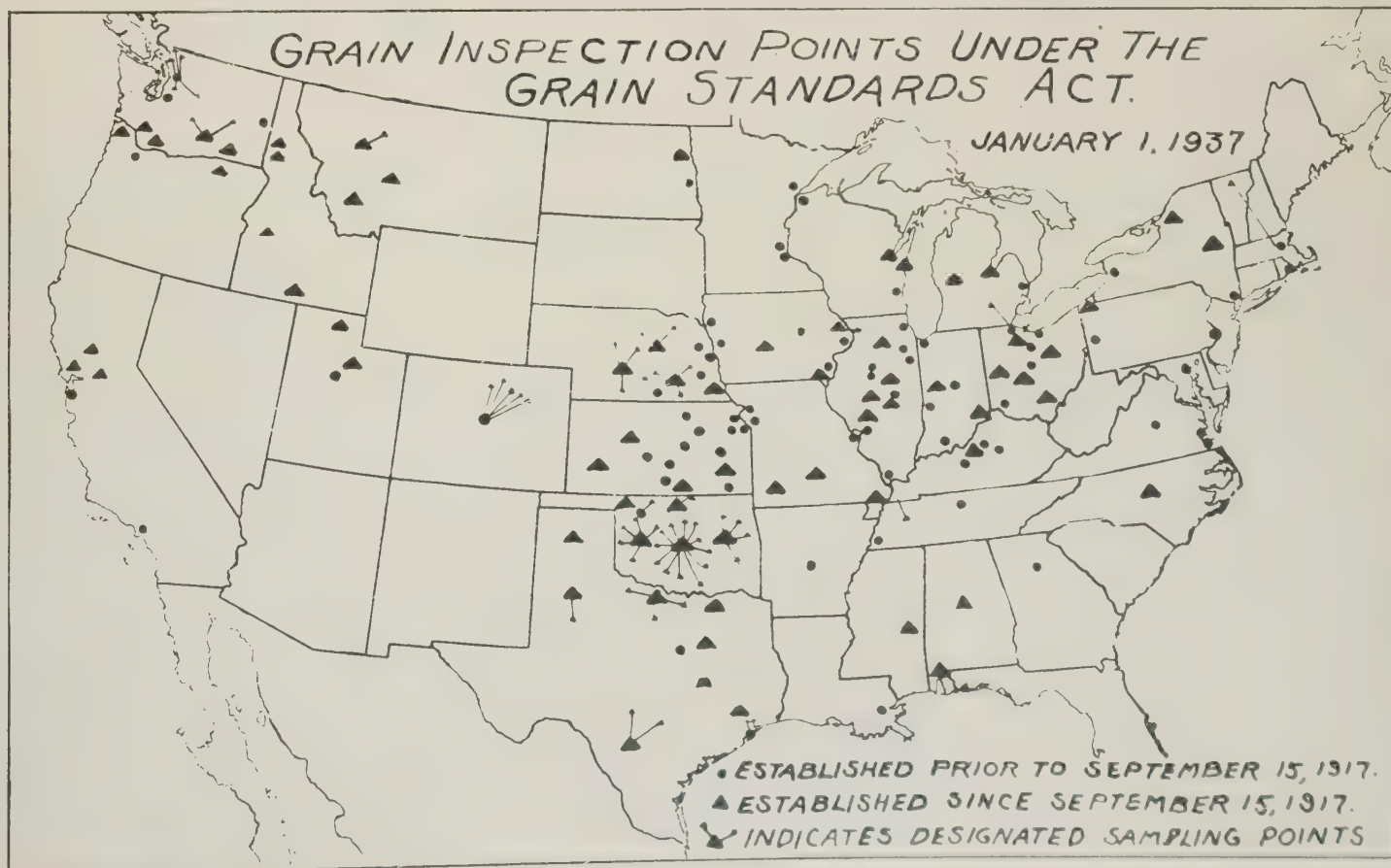
Between the original elevator and the new addition are some bins built by the Stevens Engineering Co. All of the bins in the latest addition, including the interspace bins have suspended steel hopper bottoms.

The work just completed included the addition of a 10,000 bushel barley leg, and a 10,000 bushel malt leg, to the existing elevator, extension of bagging rooms, etc., equipped with Weller Buckets and Speed Reducers. All machinery was made by J. B. Ehrsam & Sons Mfg. Co. The B. F. Goodrich Co. supplied the 4 ply Maxecon Conveyor belt, 173 ft. of 24 inch, 493 ft. of 30 inch, 28 ft. of 16 inch; and the 18 inch, 7 ply Legrain Leg Belts, 255 ft. for one leg, 260 ft. for the other. B. I. Weller furnished the 16x7 inch Calumet Buckets used on the legs.

In addition, the Weschler people are doubling the capacity of their malt plant.

A view of the elevator and new annex is reproduced on the outside front cover.

Pulverized rice hulls are finding a ready market in the mixed feed trade.



Grain Carriers

The Southeast Shippers Advisory Board at its recent meeting adopted a resolution opposing government ownership or operation of railroads.

The new Ford motorships for the Erie Barge Canal can carry 1,500 tons on the present depth of 9½ ft., and when the deepening of the canal to 12½ ft. is completed will carry 2,700 tons.

At the Chicago hearing before Examiners Mackley and Hall, the millers at rate break points complained they could not compete with interior points enjoying transit, on business to eastern consuming markets.

Kansas City, Mo.—A supplement to Western Lines tariffs, effective Jan. 1, reduced rates on livestock feeds, added Colfax, Mora, Quay and San Miguel counties in New Mexico, and continued emergency rates to 36 stations in North Dakota and two in South Dakota.

Washington, D. C.—By Feb. 1 all contract motor carriers must file with the Interstate Commerce Commission, publish and keep open for public inspection, copies of each contract in force on that date containing the charges of such carriers, and rules or regulations affecting such charges.

Washington, D. C.—As H.R. 1668 the Pettengill bill to eliminate the long and short haul clause of the fourth section of the Interstate Commerce Act, has been re-introduced in the House. Also a resolution asking inquiry to determine if coastwise traffic should be regulated by the Interstate Commerce Commission.

R. M. Field, chairman of the grain products committee of the Mid-West Shippers Advisory Board, reports that car loadings of grain products for the first quarter of 1937 will generally run 15 per cent to 20 per cent above the last quarter of 1936 and about the same as the first quarter of 1936. Stocks on hand as of Jan. 1st show a slight increase, perhaps 5 per cent over normal.

Why in the public interest, are pensions required for railway employees, but not for employees of motor lines, ships and airplanes? Why an elaborate labor relations law on the railroads, but none for motor and water lines? Why agitation for the six-hour day on the railroads when motor and water lines do not even have the eight-hour day, which was generally established on the railroads almost two decades ago?—*Railway Age*.

Washington, D. C.—Shipments of grain and flour made by the Red Star Milling Co., Wichita, Kan., and about 20 other companies, prior to July 1, 1935, to Arkansas, Louisiana and points in the Mississippi valley and Southeast are under fire in a current hearing before the Interstate Commerce Commission, involving transit privileges. Railroads are fighting any award of reparations.

Washington, D. C.—Hearings have been resumed by the Interstate Commerce Commission on the plea of railroads for permanent revision of rate structure in line with the emergency charges that expired Dec. 31. Beginning on Jan. 6, these hearings were dropped during the inaugural week. The Washington hearings will be followed by hearings at Chicago, St. Louis, the Pacific Coast and other points.

Interpretation of the Motor Carrier Act is giving interstate operators of trucks protection from state commissions. In deciding against one case of state interference an I.C.C. examiner cited *Buck vs. Kuykendall*, 267 U. S. 307, declaring: "The supreme court said that the state law, insofar as it

permits denial of a certificate of public convenience and necessity to a common carrier, purely in interstate commerce, is unconstitutional." In another ruling an Examiner said: "The authority of a state commission over carriers engaged in interstate commerce is an extremely limited one concerning the use, congestion and preservation of the highways."

Decisions and New Complaints

Before the Interstate Commerce Commission:

In No. 27497, American Popcorn Co. v. C., B. & Q., the rate on popcorn from Sioux City to Kansas City is held not to have been shown to be unreasonable.

No. 27634, Nebraska State Ry. Commission v. C. & N. W., rates on grain Norfolk to Harrison, Neb., Dakota Junction to Wayside, Neb., and Omaha and Council Bluffs in violation of section 1.

In No. 27250 the Commission has ordered canceled the schedules allowing transit on blackstrap molasses at Peoria from Gulf ports at 17½¢ while other users pay 31¢ per 100 lbs. The low rate was accorded by the Illinois Central because the Commercial Solvents Corporation could handle the molasses in its own barges at much less than 31 cents.

Safety Rules for Trucks

Rules and regulations governing qualifications of employees and safety of operation and equipment of motor vehicles operating under the Motor Carrier Act have been prescribed by the Interstate Commerce Commission in hope that these rules may help guide the 40 state legislatures meeting this year, to establish uniform trucking laws.

The regulations, effective July 1, cover qualifications of drivers, basic rules for driving, parts and accessories necessary to safe operation of trucks, and rules for reporting accidents. The rules for reporting accidents become effective Apr. 1.

New drivers, entering service after July 1, will be at least 21 years old, and have a thorough understanding of traffic signs, signals and rules of the road. Speeds at which trucks are operated must at all times be safe, with due consideration for the weather, highway, and traffic conditions, and are further controlled by local laws. Brakes, lights, horns, reflectors, tires, etc., must be inspected regularly and kept in good condition. Trucks must be supplied with flares, red flags, and fire extinguishers as part of the equipment for protection of load and traffic.

The Peddler-Trucker Problem

Commodity dealers generally have seen their business dwindle to such small comparative volume thru the unfair competition of the roving tramp merchants that virtually every convention of dealers in fruits and vegetables, lumber, coal, hay, grain, seeds and commercial feeds have devoted much time on their programs discussing this subject.

Formed primarily to oppose this trucker intrusion in the grain industry, the Associated Southwest Country Elevators have been joined by 89 state and national civic, trade and farmer ass'ns. Thousands of merchants have been so seriously affected by unregulated truckers that they have spurred their organizations to action.

W. R. Scott of Kansas City, executive vice pres. of the Associated Southwest Country Elevators, addressed the Western Fruit Jobbers Ass'n at Detroit Jan. 19 on the truck-dealer problem. He addressed the Indiana Grain Dealers Ass'n at Indianapolis Jan. 20. He will speak before the Southwestern Lumbermen's Ass'n at Kansas City Jan. 28; Sioux City Traffic Club Feb. 17, Farmers Grain Dealers Ass'n of Illinois at Peoria Feb. 24, and Nebraska Lumber Merchants Ass'n at Omaha Feb. 26.

Repeal Long and Short Haul Clause

Speaking before the Traffic Club of Chicago, Jan. 19, Congressman S. B. Pettengill said operation of the long and short haul clause, which prohibits a railroad from charging less for transporting freight between two points than is charged between intermediate points on the same route, is penalizing the interior of the country and favoring the seaboard.

"The interior of the nation for the last twenty years has been paying taxes for its own destruction," Pettengill said. "Operation of the long and short haul clause has resulted in industries moving from the interior to the seaboard."

"Repeal of the long and short haul clause will give the railroads more freedom. But it has another special significance. It represents the first time that there is a movement to unwrap the red tape around the roads. Further, the measure proposing to repeal the bill is significant in that it represents a check on the move toward government ownership."

"If the 26 billion dollar railroad industry is forced into government ownership, what industry will be free from government control?"

"My bill essentially is a shippers' bill. It is my opinion that if the railroads cannot meet their competition they should be allowed to die, but they should be allowed to compete on the same basis as the other forms of transportation."

A Railroad in Highway Transport

By H. R. LAKE, general manager highway transport department A., T. & S. F. R. Co.

We are now operating 5,175 truck route miles, which is nearly 40 per cent of the mileage of the entire Santa Fe Railway System. We are operating 12,432 route miles of bus lines which is 94 per cent of the entire mileage of the Santa Fe Railway System. Combining truck and bus route miles we have a total of 17,607 miles (over which at least one round trip of bus or truck and up to as many as twelve round trips of bus service is performed daily) which compares with 13,241 miles of the Santa Fe Railway, or 4,366 more route miles of bus and truck operations than rail mileage. We have a total of 417 employees in our trucking department and 758 in the bus department, a total of 1,175 full time employees. In addition to that, we have part time 111 freight and 667 passenger employees, a total of 778, making a grand total of 1,953 employees. We operate 155 freight trucks and 265 passenger buses; 93 daily freight schedules and 510 daily passenger schedules.

I am convinced that the highway truck has a very definite and useful place in freight transportation. Its sphere for profitable operation, of course, is limited where exclusively used, but where it can be co-ordinated with rail transportation the scope of its activities can be broadened to include the entire country.

Highway trucks can give a superior service for comparatively short distances from point of shipment because of the saving in terminal time and greater frequency of service, but there is a very definite limit to that distance, beyond which the rails excel because as the distance increases the pro rata saving in terminal time per mile traversed becomes less and less until it finally disappears as a factor to be reckoned with, but by again bringing the truck into play, the combination affords a service that excels the rail on long distance hauls.

Gross farm income has been moved up from \$5,400,000,000 in 1932 to \$6,400,000,000 in 1933, to \$7,300,000,000 in 1934, to \$8,500,000,000 in 1935, and to \$9,500,000,000 in 1936, under the stimulus of worldwide business recovery.

Supreme Court Decisions

Landlord by permitting tenant to remove year's crop of potatoes from premises, lost whatever lien he may have had upon such crop. (Ky. stat. sec. 2317)—*Martin v. St. Matthews Produce Exchange, Court of Appeals of Kentucky*, 95 S.W., (2d), 1119.

Stowage of Fish Meal.—Evidence held to establish that shipowners were negligent in stowing shipments of fish meal in lower holds of ship in large masses without making adequate provision for ventilation, and hence liable for resulting damage to fish meal by heating.—*The Michio Maru*, 14 Fed. Supp. 727.

Warehousemen.—Loan agreement between owner of cotton and creditor wherein warehouseman agreed to accept reduced storage rates held not merged by creditor's purchase of cotton, and hence creditor was not liable for storage in excess of agreement, notwithstanding alleged local custom to charge regular rate after loan was paid.—*Burns v. Chas. W. Shepard & Co., Supreme Court of Alabama*, 116 South. 416.

Trucks owned and operated and used by lumber company in transporting lumber over non-urban state highways for which company made delivery charge based upon weight of truck and distance traveled, held "constant carriers" subject to statute requiring operators to obtain permits from State Railroad Commission.—*New Way Lumber Co. v. L. A. Smith et al. railroad commissioners, Supreme Court of Texas*, 96 S. W. (2d) 282.

Warehousemen.—Where there are adverse claimants of goods, warehouseman should refuse delivery so that ownership may be judicially ascertained. Warehouseman held responsible to recognized rice owner for proceeds which warehouseman delivered to adverse claimants without requiring them to interplead (Act No. 211 of 1908, § 1; Act No. 221 of 1908, §§ 17, 24).—*Guillory v. McManus, Court of Appeals of Louisiana*, 145 South. 403.

Processing Tax.—Money deposited by processor as condition of temporary injunction restraining collection of processing tax under

Agricultural Adjustment Act would be repaid to processor after Supreme Court had finally determined that processors were not liable for such taxes, without determining rights of those from whom processor was alleged to have collected tax.—*Perry Mill & Elevator Co. v. Jones, U. S. District Court, Oklahoma*, 13 Fed. Supp. 241.

"Retains" by Co-operative.—Where non-profit co-operative marketing ass'n ceased to function soon after grower resigned his membership, he could recover his pro rata part of any surplus on hand arising from "retains" for handling fruits during his membership, notwithstanding charter provided that, on member's retirement, all of his rights and privileges in ass'n should thereupon cease.—*Ozona Citrus Growers Ass'n v. McLean, Supreme Court of Florida*, 165 South. 625.

Stopping Motor Trucks.—Statute authorizing state highway officers, upon reasonable belief that motor carrier operated for compensation or hire on public highway is being operated without permit or with unlawful load, to stop driver without search warrant and, if necessary, to ascertain whether operation is in violation of law, held not unconstitutional as authorizing "unreasonable search and seizure."—*New Way Lumber Co. et al. v. Smith, Supreme Court of Texas*, 96 S. W. (2d) 282.

Spotting Freight Cars.—Where spotting service was included within railroad's published tariffs and was part of the line-haul freight charge, and there were no circumstances relieving carriers of duty of supplying such service, shippers held entitled, under agreement with railroad, to do such services themselves and receive compensation for such services (Interstate Commerce Act).—*American Sheet & Tinsplate Co. v. United States, District Court, Pennsylvania*, 15 Fed. Supp. 711.

Bankruptcy.—Lease of large grain warehouse, which lease was about to expire, and value of which warehouse was dependent upon its use during particular period of year

then about to begin, could be disposed of as "perishable property" by court of bankruptcy in reorganization proceeding; court in such case having jurisdiction of an equity court (Bankr. Act Sec. 77B (a), 11 U. S. C. A. Sec. 207 (a)).—*Mercantile Trading Co. v. Rosenbaum Grain Corporation, U. S. Circuit Court of Appeals*, 83 Fed. (2d) 391.

Bankruptcy of Board Member.—Federal District Court wherein grain corporation, a member of the Board of Trade, filed voluntary petition for reorganization under Bankruptcy Act, has power to restrain Board from suspending arbitrarily or on insufficient evidence petitioner's officers who were registered members, notwithstanding State Supreme Court's holding that sufficiency of evidence to authorize expulsion of member may not be inquired into by courts.—*In re Rosenbaum Grain Corporation, U. S. District Court*, 13 Fed. Supp. 601.

Monopolies.—Sugar refiners by collecting and circulating only among themselves detailed statistics respecting production and delivery, and thereby obtaining unfair advantage as to purchasers, held to have effected an unfair restraint of trade (Sherman Anti-Trust Act Sec. 1).—*United States v. Sugar Institute, District Court, New York*, 15 Fed. Supp. 817. The court also held the refiners thru the Institute exercised unlawful control over brokers and warehousemen; and engaged in unlawful price fixing. The Sugar Institute was recently dissolved.

A.A.A. Can Restrict Shipments.—Marketing provisions of Agricultural Adjustment Act authorizing limitation of shipments of agricultural products in interstate commerce held not unconstitutional as authorizing an unlawful regulation of production, since provisions were within power of Congress to regulate interstate commerce.—*United States v. Edwards, District Court, California*, 16 Fed. Supp. 53.

The government sought to enjoin the Edwards Fruit Co. from shipping oranges in excess of allotments under its order of Jan. 26, 1936.

Cologne, Minn.'s 30,000 Bus. Modern Elevator

The Cologne Milling Company awarded the contract for a new 30,000 bushel elevator at Cologne, Minn., in the Summer of 1936, to be completed in time to handle the new crop. Cologne is located on the Milwaukee Railroad thirty-five miles west of Minneapolis.

The Cologne Company has been operating a mill in this town for sixty years. In 1933 the T. E. Ibberson Co. built a complete new feed mill unit for it, which is adjacent to the mill building shown in the engraving herewith.

The new elevator was divided into 18 bins. It has one leg with D. P. Buckets, fitted with a Winters Head Drive and improved Spouting.

A cross workfloor was used in the elevator and on this workfloor is located a cylinder type cleaner; special blending facilities were included on the workfloor for service from the elevator to the flour mill. A warehouse was built on the side of the elevator for storing feed and flour products, and under the elevator is a full basement. A driveway along the side of the mill, and the elevator, houses a 20 ton 26 ft. Fairbanks Morse Dump Scale fitted with a modern air dump.

The plant is powered by motors with individual drives on the cleaner, air compressor and heads. The whole plant on the outside, walls and roof inclusive, is covered with galvanized iron. The T. E. Ibberson Company designed and built this plant.

Farmers who buy only on price are easy marks for sharp-shooting itinerant merchant truckers.



A 30 000-bus. Elevator Added to Plant at Cologne, Minn

750,000-Bu. Elevator at Hutchinson, Kan.

Hutchinson, a railroad center in central Kansas, has tributary to it as a primary market the large grain growing area to the Southwest, warranting the construction of terminal elevator facilities such as those recently completed for the Farmers Co-operative Commission Co.

Concrete reinforced with steel is the material of construction not only of the storage and head house, but of the track shed as well.

THE HEAD HOUSE is 31'6"x36' and 224' from boot pit to roof and contains 14 rectangular bins with all hoppers bottoms, two garnerers of 2,500 bu. capacity each. There are two stands of legs, using 26" belts with two rows of 12"x8" Minneapolis V cups and are each driven by 100-hp. motors thru speed reducers. At present one 2,500-bu. hopper scale of Fairbanks Morse make is installed and space has been provided for another of the same capacity. Belt type, Great Western Manlift was used with electric eye safety device. This manlift extends from basement floor to head floor. Grain is loaded into cars by two loading spouts.

THE TRACK SHED is 46'x75' and has two tracks passing thru with a capacity of four cars. The unloading is done with two double power shovels driven by 7½-hp. gear reducing motors. In a pit below the rail level is located a two drum car puller operated by a 40-hp. slip ring motor. Underneath the interlocking valve track sink is a 36" receiving belt driven by a 7½-hp. gear reduced motor, discharging to either or both of the two 12,000-bu. legs.

THE STORAGE ANNEX consists of 14 circular bins 21 ft. in diameter, 12 intervening and 7 interstice bins, which are 124 ft. high, all

with hopper bottoms. Under these tanks is a full daylight basement 7'6" high. Over these tanks is a gallery 8' high by 16' wide. The receiving belt to the storage is 36" wide by 183', center, driven by a 20-hp. gear reducing motor. The shipping or basement belt is 32" by 177' centers and is driven by a 15-hp. gear reducing motor.

The entire elevator is built so that all bins are overhead and above ground, making a daylight basement.

Anti-friction bearings were used thruout the elevator. The plant was designed and erected by Chalmers & Borton.

Professor Maxwell's six months forecast, from January to June, indicates good spring moisture for Kansas, but, according to his report, the spring wheat belt, which is already exceedingly dry, will not receive general rains until late Spring.

Portland, Ore. — Managers of 25 locals of North Pacific Grain Growers, Inc., met here last month and formed a local manager's association. J. T. LaFollette was made chairman, and Jas. Hill, secretary. The purpose is to divide Pacific Northwest cooperatives into districts, and hold regional meetings.

"The range in Wyoming was just as dry back in 1886 as it is today and the bureaucrats, headed by Secretary Ickes and Wallace, are using the drouth merely as a subterfuge in their efforts to get the whole range country under their control. Today these 'princes of power' are engaged in a titanic struggle for the control of the West."—Thos. Cooper of Casper, Wyo., pres. Wyoming Wool Growers Ass'n.

Commodity Exchange Act Crudely Drafted

By LLOYD S. TENNY, business manager
Chicago Mercantile Exchange, before
Farm Economic Ass'n

This Act, except as it relates to an amendment to the Grain Futures Act, was conceived and enacted into law without the proper consideration by the Administration, by Congress, or by the industry itself. Butter, eggs, Irish potatoes and cotton were added. Why? Why were lard and pork products omitted? Why were hides, coffee and cocoa not included? Sugar is an important agricultural product and practically every person is a consumer. Why was sugar omitted? To these questions and others, there simply is no answer. As far as butter and eggs were concerned, these two great industries were regulated by law without a hearing before any Congressional Committee.

This procedure is un-American and we condemn it as a practice. Apart from every other consideration, and granting that a law is ultimately to be passed, we feel that the leaders in any industry know something about their business and can contribute ideas that will be reasonable and constructive when embodied in a law. If Congress did not act on this matter in a haphazard and loose manner when it included other commodities in a grain measure, then the only other conclusion that can be reached is that those who favored the inclusion of our commodities, felt that those who were actually using our futures market, representing primarily the middle-man group, were wholly selfish and, therefore, unreliable as advisers in drafting a law.

The law requires that any exchange to become a contract market must provide rules requiring any warehouse from which goods may be delivered to come under the control of the federal administration. In other words, this appears like the back door method of securing legislation which by the front door is unconstitutional. I doubt if any person can claim that a local cold storage warehouse in Chicago simply engaged in the cold storage business for local residents, is engaged in interstate business, and yet by this method of legislation these warehouses are subject to federal inspection and control.

If this principle of legislation is upheld, then can Congress control the farm papers and the newspapers that carry advertisements by future commission merchants? Can Congress control the restaurants where future commission merchants eat and the street railways which carry the merchants to the trading floor? These absurdities are presented to bring to your attention this very important trend in our national legislative halls.

Washington, D. C.—A special com'te of the U. S. Chamber of Commerce has asked Congress to prevent possibility of damage suits against business men, and postpone any further similar federal and state legislation until the Federal Trade Commission has completed cases of violation of the Robinson-Patman law now before it. The law is subject to a variety of interpretations, said the com'te.

Washington, D. C.—Northwestern United States will again experience severe drouth conditions in the decade, 1975 to 1985, and will have a moderate drouth from 1950 to 1960, predicts the 23-year-cycle weather hypothesis of Dr. Charles G. Abbott, sec'y of Smithsonian Institute. Dr. Abbott claims for his hypothesis that altho certain details remain to be worked out, "certain large and prolonged features . . . seem to be clearly predictable."



Reinforced Concrete Storage Annex, Head House and Track Shed of Farmers Co-operative Commission Co.'s 750,000-bu. Elevator at Hutchinson, Kan.

Grain and Feed Trade News

Reports of new firms, changes, deaths and failures; new elevators, feed mills, improvements, fires, casualties and accidents are solicited.

ARKANSAS

Benton, Ark.—A feed warehouse, garage and truck belonging to W. E. Carson burned Jan. 6; loss, \$3,000.

Ft. Smith, Ark.—The O. K. Feed Mills, Inc., have increased their capital stock to 1,000 shares, of which 500 are common at \$100 par value, and 500 are preferred at \$100 par value.

CALIFORNIA

Fresno, Cal.—J. B. Hill will expend about \$100,000 on grain warehouse and equipment.—F. K. H.

Sacramento, Cal.—The Farmers Produce Co. sustained damage from wind to stock of beans stored in the Hazlett Warehouse on Dec. 26.

El Centro, Cal.—Williams Bros. Grain & Milling Co. has bought the Imperial Valley Warehouse Co. and will retain J. P. Eyer as manager.

Stockton, Cal.—Work of constructing a second electric overhead belt conveyor to speed the loading of grain into ships was launched early this month by the Port of Stockton Grain Terminal at a cost of \$40,000. Construction will take approximately 40 days.

Corcoran, Cal.—The large plant of the Corcoran Milling Co. burned at 7 p. m., Dec. 23, together with a quantity of grain, mostly barley, stored in the warehouse, and approximately 200,000 sacks of grain, flour and other products; loss, \$400,000; covered by insurance. The fire was reported to have originated in the mill section of the plant.

Sacramento, Cal.—Attorney-General U. S. Webb wrote recently: "Under the Unfair Practices Act it is unlawful to sell below cost of doing business where such selling is done for the purpose of injuring competitors and destroying competition. 'Cost of doing business,' under the Unfair Practices Act, includes taxes among other items of expense, and as we held in Opinion No. 10186, the mark-up to cover cost of doing business is to be applied to each article or service sold."

Sacramento, Cal.—The grain division of the California Hay, Grain & Feed Dealers' Ass'n has decided that the best procedure would be to endeavor to have the present Bag Law repealed and a gross weight law in place of it on grain, and will probably introduce two bills, one amending the present Sack Law to allow grain to be bought and sold under the present law, or on gross weights without separate payment for the bags; the other a straight gross-weight law covering whole grain in its original condition and original bag.

CANADA

Renfrew, Ont.—The Ottawa Valley Grain Products Co. recently purchased a fanning mill from the Sidney Grain Mchy. Co.

Ft. William, Ont.—William McCormick, employed in the unloading department of the Ft. William Elvtr., was painfully injured, Jan. 13, by being struck on the side of the face by a trip rod at the elevator. His face was badly crushed and his jaw bone fractured.

ILLINOIS

Lebanon, Ill.—The Pfeffer Milling Co.'s property has been purchased by C. Meyer.

Marshall, Ill.—The Marshall Feed & Produce Co. has been purchased by Logan Myles.

Cropsey, Ill.—A feed warehouse has been completed by the Cropsey Co-op. Grain Co.

Galva, Ill.—Jacob Kroll, who operated the Galva Cereal & Feed Mill from 1901 to 1913, died Jan. 5 at the age of 80 years. The mill is now operated by his son George.

Altona, Ill.—A new coat of aluminum paint has been given the Farmer's Co-op. Grain Co.'s elevator.

Warrensburg, Ill.—The Warrensburg Grain Co. recently added a heavy duty Soweigh Motor Truck Scale to its equipment.

Pawnee, Ill.—The W. W. Hill elevator has been bought by Meade McWilliams and is now operating under the new ownership.

Somonauk, Ill.—The W. A. Westbrook Grain Co. recently purchased a 20-ton Soweigh Heavy Duty Motor Truck Scale with a 9x34-foot platform.

Natrona, Ill.—Koert Bartman, of New Holland, has purchased the grain elevator here that was being razed, and will use the lumber in building a barn and several corn cribs on his farms.

Kirkland, Ill.—The Kirkland Coal & Feed Co. is the name under which the new owners of the former George W. Banks & Son elevator are operating the business, with L. W. Colton as manager.

Morris, Ill.—The Central Grain, Lumber & Supply Co., operating north of Morris, closed its 1936 year with following results: Grain handled 263,042 bus., merchandise sales \$8,312, gross gain \$4,792, expenses \$3,511, operating gain \$1,281.

Cullom, Ill.—The Cullom Co-op. Grain Co. has appointed Leroy Hack, son of R. J. Hack, manager of the elevator, assistant manager, succeeding Arthur Ramien, who is now manager of an elevator at Cooksville, Ill., as reported in the Dec. 9 Journals.

Woodhull, Ill.—The Woodhull Grain Elvtr. Co. has appointed George Bloomberg (assistant manager for the past six years) to succeed I. R. Titus on Mar. 1, as manager of the elevator, Mr. Titus having resigned after having managed the elevator for 19 years.

Peoria, Ill.—After 43 years in the country grain elevator business the firm of Davis Bros. & Poiter has decided to dissolve its business and has offered its elevators for sale. The firm has operated plants in Illinois and Iowa, with offices at Peoria, Ill., and Fort Dodge, Ia.

Cadwell, Ill.—Damages of \$5,000 from the Moultrie Grain Ass'n are asked by James B. Craig, Jr., in a suit recently filed, who alleges that the elevator built by the grain company in 1936, which is only 100 feet from his dwelling house, has damaged the property with chaff and snioke.

Champaign, Ill.—A meeting of the grain trade of the Champaign territory was held at the Hotel Inman, in this city, Jan. 20, at 6:15 p. m., the hotel serving the dinner at 6:30. The main topics of discussion were truck legislation and the proposed new soybean mill of Swift & Co., which is to be located at Champaign, as previously reported in the Journals.

Monee, Ill.—Just as Harvey Kolstedt, office manager of the Monee Grain & Lbr. Co., was finishing checking the day's receipts near closing time on Jan. 6, two armed robbers appeared, and holding a gun to his back, relieved him of \$185. One of the two robbers had visited the office the day before in the guise of a salesman, to familiarize himself with the layout of the office. The two are believed to be the same who held up and robbed Manager Philo C. Allen at the elevator of the New Lenox Grain Co., at Spencer (New Lenox p. o.), on Oct. 31 last, as reported in the Nov. 25 Journals.

CHICAGO NOTES

A Board of Trade membership sold recently for \$6,300, the highest price since November, 1935, when certificates sold for \$6,600.

At a special meeting of the directors of the Board of Trade, Fred H. Clutton, sec'y, and William B. Bosworth, assistant sec'y, were re-appointed for 1937.

Puritan Mills, incorporated; capital stock, 2,000 shares p. v. common; incorporators: Leroy Baumgartl, L. J. Wilhartz, S. E. Hirsch; to deal in grain, feedstuffs, hay, etc.

A special com'lite, working with W. R. Meadows, cotton registrar, is preparing supplements to Board of Trade rules which will provide for a cottonseed futures market for the benefit of processors, producers and speculators.

The monthly dinner and meeting of the Chicago chapter of the Society of Grain Elvtr. Superintendents was held Jan. 19 in the Medinah Club. W. H. McDonald talked on "Diminishing Receipts at the Central Markets" and Ralph H. Brown on "The World Wheat Situation."

Frank M. White has sold his membership in the Board of Trade and retired, after being a member for 40 years. Because of his high standing in the exchange and also his long association with it, he has been given honorary floor privileges by the directors of the board.

New members of the Board of Trade are: Norman J. Garneau, of River Forest, Ill.; John R. Dillon, New York, and John J. Schreiner II, who is the seventh member of his family to hold an active membership in the Chicago exchange. He is associated with his father, Charles A. Schreiner, and will become a broker in the rye pit.

William Dunn, oldest member of the Board of Trade, celebrated his ninetieth birthday on Jan. 21, when 16 of his friends on the exchange, including several officials, were invited by Second Vice-Pres. Faroll to a luncheon for Mr. Dunn. He continues an active member of the exchange, of which he has been a member since 1879. He was born in England, coming to this country in 1879 to engage in the export grain business.

Recently elected officers of the Board of Trade Clearing Corp. are as follows: Pres., Richard F. Uhlmann; vice-presidents, Orrin S. Dowse and John G. McCarthy; sec'y, Howard Ellis; assistant sec'y, William S. Symmes; treas., Charles V. Essroger; assistant treas. and manager, Karl H. Rehnberg; assistant manager, James A. Hunter. Mr. McCarthy is the only new officer. New directors elected were: Mr. Uhlmann, Mr. McCarthy, G. W. Hales, Robert J. Hanley, Edwin H. Bagley.

Among the standing com'lites of the Board of Trade for 1937, which have been named by Pres. Templeton and approved by the directors, are the following: Business conduct, W. H. Smith chairman; clearing house, J. E. Bennett chairman, R. I. Mansfield, J. J. Bittel; executive, S. C. Harris chairman, Barnett Faroll, J. E. Brennan; grain, L. T. Sayre chairman, A. W. Kay, E. R. Bacon, J. E. Brennan, Adolph Gerstenberg, W. H. McDonald, O. S. Dowse, K. B. Pierce; soybean, G. H. Tanner chairman, J. E. Bennett, J. J. Bittel, G. E. Booth, A. D. Sturtevant, O. S. Dowse, H. C. Schaack; weighing and custodian, A. W. Kay chairman, L. T. Sayre, A. C. Sullivan.

STRATTON GRAIN CO.

MILWAUKEE, WIS. ST. JOSEPH, MO. NEW YORK, N. Y.
CHICAGO, ILL.
MILL FEEDS — FEED PRODUCTS — BY-PRODUCTS
Future Orders Solicited

INDIANA

Geneva, Ind.—The Geneva Grain & Milling Co. has installed a Sidney Fan Sheller.

Connersville, Ind.—The Farmers Feed Co. is a new concern here, recently opened by Bert Osborne.

Amboy, Ind.—The Amboy Grain Co. has added to its equipment an 80-bu. Sidney Special Feed Mixer.

Cynthiana, Ind.—Installation of a new feed mixer has been completed at the Farm Buro Elvtr., of which J. O. Smith is manager.

Frankfort, Ind.—The Fairground Elvtr., managed by Rhual Tompkins, has installed a new one-ton vertical feed mixer and 5-h.p. GE Motor.

Fort Wayne, Ind.—Chester J. Nathan, owner and operator of several country elevators in northeastern Indiana for many years, died on Jan. 12.—L.

Dana, Ind.—Francis W. Gilbert, former grain dealer and stock buyer, died Dec. 24, at his home here, at the age of 70 years, from paralysis. He retired two years ago.

Crawfordsville, Ind.—The Busenbark Grain Co. is remodeling its building on Main St., putting in a modern front, an office and a display room for the products handled by the company.

Rochester, Ind.—Clarence Viers has bot the stock in the Anchor Milling Co. formerly owned by Earl Wicks, and a suit for receivership of the company has been dismissed. Mr. Viers and John Meneely will supervise operation of the mill.

Oakville, Ind.—The Farmers Elvtr. Co.'s power will soon be changed from 25 cycle to 60 cycle; when this change is made, the company will install a new complete standard wiring job and inclosed, dustproof motors. A new hammer mill is also contemplated.—L.

Ft. Wayne, Ind.—Chester J. Nathan, formerly of the grain firm of Nathan & Levy, died Jan. 12, at the University of Michigan Hospital, Ann Arbor. Mr. Nathan, who was a prominent citizen of Ft. Wayne, had been ill for a year, his sickness starting with pneumonia.—L.

Columbia City, Ind.—Several improvements in the plant of the Columbia Grain Co., managed by Royal D. Clapp, have been completed. The new machinery includes a Western Corn Sheller, two new drag lines and a variable speed control from Union Iron Works, a Bauer Upright Feed Mixer, a direct-connected Jay Bee Hammer Mill, and four new GE Motors. A new corn cracker is expected to be installed soon.

Elwood, Ind.—Heavy timbers from the old Harting Elvtr. on Main St., which is being razed by the present owner, the Kiefer Feed & Supply Co., will be used in the construction of an annex to the Anderson St. elevator, formerly operated by the Jay Grain Co., and now owned by the Kiefer Co., which has been operating the two elevators for some time. Work on the annex will progress as fast as weather conditions permit. Faster feed grinders, corn shellers and grain cleaners will be installed.

IOWA

Clemons, Ia.—Mail addressed to the Clemons Co-op. Ass'n is returned by the post office marked "Quit business."

Graettinger, Ia.—The erection of a new grain elevator at this station in the spring is contemplated by the Quaker Oats Co., it is reported.

Reinbeck, Ia.—P. M. Mettlin & Co. have built a 16x20-foot building in which they have installed machinery for grinding and mixing feed.

Soux City, Ia.—Sam Mason, of the Terminal Grain Corp., has the sympathy of the trade in the death of his mother, which occurred on Jan. 9.—Art Torkelson.

Conroy, Ia.—The Conroy Grain & Lumber Co. has re-organized into a co-operative and has taken the name of the Farmers Grain & Lumber Co. E. E. Strait is manager.

Des Moines, Ia.—The annual convention of the Farmers Grain Dealers Ass'n of Iowa will be held in this city Jan. 26 to 29, inclusive, with headquarters at the Savery Hotel.

Webster City, Ia.—The Hamilton County Farmers Elvtr. Ass'n has been organized here, with H. L. Christenson, manager of the Farmers Elvtr. Co.'s elevator at Stratford (Boone P. O.) as president.

Malcom, Ia.—After pleading guilty to a charge of breaking and entering the Malcom Farmers Elvtr. Co.'s elevator, Vern Dykes, of Malcom, and P. L. Dean, of Grinnell, were sentenced recently to serve 10 years at Ft. Madison.

Elkhorn, Ia.—Charles Kolb, manager of the Cox Grain & Feed Co. since that company leased the elevator here over a year ago, has resigned, effective Mar. 1, and will move to his recently purchased farm near Winterset, Ia.

Huxley, Ia.—L. T. Larsen, manager of the H. L. Munn Lbr. Co., which operates an elevator here, started 1937 in great style. His new baby daughter arrived shortly after midnight, Jan. 1.—Art Torkelson, with Lamson Bros. & Co.

Ft. Dodge, Ia.—Davis Bros. & Potter, operating elevators in this state and in Illinois, with offices at Ft. Dodge and at Peoria, Ill., have decided to discontinue business, after operating country grain elevators for 43 years, and have offered their elevators for sale.

Little Cedar, Ia.—M. H. Barker, manager of the Little Cedar Grain & Coal Co.'s elevator for the past 14 years, has resigned to take effect Mar. 1, and has accepted a similar position at Manly, Ia. He will be succeeded here by Kenneth Knapp, of Charles City, who will move his family to this point.

Webster City, Ia.—Elevator managers of Hamilton County held a meeting here on Jan. 12 at the Willson Hotel. The program was held after a 6:30 dinner. Dr. Layton, of the botany and seed department of Ames College, gave a talk on controlling mold and smut. Don Edison, sec'y of the Iowa Farmers Grain Dealers Ass'n, was an invited guest.

Massena, Ia.—A \$5,000 damage action has been filed against Tom Hogan and E. E. Perry, local grain dealers, by Ira Orvis, who claims that they falsely testified against him before the grand jury in April, 1935. Orvis was arrested for allegedly selling corn on which there was a landlord's lien. Orvis later was released and the indictment was dismissed.—A. T.

Hamburg, Ia.—Six men were recently arrested at St. Joseph, Mo., accused of several forgeries in Iowa, the most serious of which occurred at Hamburg, where, it is reported, they gave Wert Reid, elevator man, a \$775 draft in payment for corn. Coon Rapids, Sioux Rapids and Conway are other Iowa points where the forgeries are claimed to have been committed.—A. T.

Moville, Ia.—W. L. Sanborn is the only one of this town's first settlers still in business here. He owns and operates the local grain elevator here just as he has done for the last 49 years, surviving a flood, a blizzard (when the thermometer dropped to 44 degrees below zero) and a bad fire, in years gone by. Mr. Sanborn has also served as mayor of the town and school director.

KANSAS

Sylvia, Kan.—A new feed mill is being operated here by Lloyd Mace.

Cheney, Kan.—Lightning slightly damaged the office building of the Morrison-Gregg-Mitchell Grain Co. on Jan. 7.

Wamego, Kan.—The Wamego Seed & Elvtr. Co. has installed a Great Western Super-Syfon Separator in its hammer mill.

Larned, Kan.—A 14,000-bu. elevator is being erected on the John M. Lewis farm, southwest of here, the elevator to have electric hoisting equipment.

Topeka, Kan.—Fire reported as having been caused by a break in the oil line slightly damaged the mill plant of the Topeka Flour Mills Corp. recently.

Larned, Kan.—The 100,000-bu. elevator and mill of the old Keystone Mill are being reconditioned by the Stafford County Flour Mills Co., which purchased the property last summer.

Hutchinson, Kan.—A fire reported as possibly being caused by scale tickets dropping on an electric stove in the plant of the Western Terminal Elvtr. Co. damaged the building and stock, Jan. 7.

Manning, Kan.—O. J. Unruh has been appointed manager of George E. Gano's elevator at this point, succeeding his brother, Almon Unruh, who has been transferred to the Gano elevator at Scott City, Kan.

Smith Center, Kan.—The elevator and stock and mill plant buildings, equipment and stock of the Smith Center Co-op. Mill & Elvtr. Co. were destroyed by fire of undetermined cause on Jan. 7, shortly after midnight. Loss, about \$45,000; partly insured. The elevator contained about 20,000 bus. of wheat.

Paola, Kan.—We have now under construction a new elevator and feed mixing plant, in which we expect to install the following equipment: Corn sheller, oat huller or corn cracker mill or both, 4 to 6 bu. automatic scale, vertical feed mixer, seed cleaner of 50 to 100 bus. capacity and one freight elevator of one ton capacity.—Buchman Seed & Feed Co., J. D. Buchman.

Scott City, Kan.—W. R. Stevenson, manager of George E. Gano's local elevator for many years, resigned the first of the year and expects to devote full time to his feed and coal business. He will continue to be located, for the present at least, at the Gano office. Almon Unruh, manager of the Gano elevator at Manning, has succeeded Mr. Stevenson at the elevator here.

Hutchinson, Kan.—Work is nearing completion on the addition to the Grainbelt Elevator Co., which is now owned by the Smoot Grain Co., Salina, Kan. The improvements include 22 feet of height to the head house, 2 2,500-bu. steel garners, 2 legs increased from 7,000 bus. to 10,000 bus. hourly capacity, using Calumet Cups. All belt conveyors and spouting have been increased accordingly. Work is being done by Chalmers & Borton.

Lawrence, Kan.—The W. J. Small Hay & Grain Co. plans the erection of a \$40,000 alfalfa dehydrating plant here, construction to start immediately. A building to house the dehydrating plant, an office building and a warehouse capable of housing 2,000 tons of alfalfa meal will be erected, construction to be of corrugated sheetiron. The Small Co. operates dehydrating plants at Kansas City, Kan., Neodesha, Kan., and Shawnee, Okla.

St. John, Kan.—The Midwest Grain Co. awarded the contract to Chalmers & Borton for a 30,000-bu. short-studded frame, iron-clad grain elevator, to be 29' x 29'6" x 48' high with 18-foot cupola. The foundation will be of reinforced concrete and the elevator will have concrete driveway and work room floor. Equipment includes 5-bu. automatic scale, Ehram combined elevator headdrive, Ehram overhead Truck Lift with 3-h.p. Fairbanks-Morse Motor. Leg will be driven by 10-h.p. totally inclosed Fairbanks-Morse Motor and fitted with 9x5 Calumet Cups and at the head is installed a Palmer Vacuum Suction Cleaner. Work is now under way and the elevator is to be completed by March 10.


KENTUCKY

Sebree, Ky.—A hammer mill for grinding corn into feedstuff has been installed by Ern Knight.

Versailles, Ky.—The Farmers Union Mill Corp. has been dissolved and C. A. Howard, who has been the owner of the greater part of the stock for some time, has purchased the interests of other stockholders and is now sole owner of the business, which he will conduct as the Farmers Union Mill, C. A. Howard, proprietor.

Louisville, Ky.—Officers of the Southeastern Millers Ass'n were re-elected at the annual meeting held Jan. 12, and are as follows: Pres., John A. Reis, Indianapolis, Ind.; vice-presidents, J. L. Davis, Seymour, Ind., and Theodore Stivers, Rome, Ga.; sec'y, Gustave Breaux, Louisville; treas., Ruby Greene, Louisville.

RATS DRINK



RAT-CIDE

A rat poison especially effective for mill and grain warehouses where rats have lots to eat but little to drink.

Write for literature and prices.

THE WEEVIL-CIDE COMPANY
1408 W. 9TH ST. KANSAS CITY, MO.

Ashland, Ky.—The Ballard & Ballard Co., which has been using property of the Chesapeake & Ohio Railroad here for branch storage, has purchased the former milling property of the old Ashland Milling Co., which will be used exclusively for warehousing purposes on products milled at Louisville. Harry Moore is in charge at Ashland.—A. W. W.

MICHIGAN

Waldron, Mich.—Alpha Martin has installed a new feed grinder.

Freeland, Mich.—Fox & Basler have installed a feed mixer in their elevator.

Wayland, Mich.—Elenbaas Bros. have installed a Blue Streak Jr. Corn Cracker.

Holly, Mich.—The Holly Grain & Produce Co. sustained wind damage on Dec. 30.

Camden, Mich.—The feed mill of Paul Kolor is being equipped with electric motors.

Yale, Mich.—A grain and bean drier has been installed in the Yale Elvtr. Co.'s plant.

Central Lake, Mich.—The Argo Milling Co. has installed a cleaner and a 3-h.p. motor.

Mayville, Mich.—The Frutchey Bean Co. has installed a seed cleaner driven by a 3-h.p. motor.

Snover, Mich.—The Snover Co-op. Ass'n has installed an electro-magnetic separator on its feed mill.

Erie, Mich.—The Toledo Grain & Milling Co. recently installed a Sidney Electric Truck Dump at its elevator.

Grand Rapids, Mich.—Van Ess & Schroeder have installed a mixer and a 5-h.p. motor in their feed mill.

Brown City, Mich.—The Brown City Elvtr. Co. has installed a grain cleaner and a 5-h.p. fully-enclosed motor.

Elwell, Mich.—The Peoples Elvtr. Co. has installed a grain drier and three additional fully-enclosed motors.

Cass City, Mich.—A 7½-h.p. fully-enclosed motor has recently been added to the Frutchey Bean Co.'s plant.

Utica, Mich.—The Utica Farm Bureau has installed a Jacobson Electro-magnetic separator ahead of the feed mill.

Caledonia, Mich.—The Farmers Elvtr. Co. has recently added a cleaner and a 5-h.p. motor to its elevator equipment.

Vermontville, Mich.—Anti-friction bearings have been installed on the main line shaft of the Citizens Elvtr. Co.'s plant.

Middleville, Mich.—An electro-magnetic separator is being installed ahead of the feed grinder in French & Co.'s mill.

Jonesville, Mich.—C. S. Bater, who is operating a feed mill in the old Jonesville Milling Co. plant, has installed a feed mixer.

Clio, Mich.—The elevator of the F. M. Houghton Co. has recently been rewired with conduit on the entire electric lighting system.

Betzer (r. d. Pittsford), Mich.—Clarence Frank has improved the equipment of his mill by the installation of a new feed grinder.

Jasper, Mich.—The Jasper Grain Co., which is operated by Charles Coy, recently replaced its engine power with a number of electric motors.

Forest Hill, Mich.—An electro-magnetic separator will be installed ahead of the feed mill at the elevator known locally as the Hudson Elvtr.

Lapeer, Mich.—The O'Rourke Mill has been equipped with a 30-h.p. fully-enclosed pipe-ventilated motor to supplement the water power.

Ruth, Mich.—The Ruth Farmers Elvtr., Inc., with a membership of 200, is reported to have taken over the elevator of C. P. Cook, with Mr. Cook as manager.

Ogden, Mich.—The elevator of the Blissfield Co-op. Co. has recently discontinued engine power, which has been replaced with four fully-enclosed electric motors.

Dundee, Mich.—Karnar Bros. are installing a direct heat Randolph Grain Drier of the oil-burner type. They are also installing three additional electric motors.

Merrill, Mich.—Following a small fire recently, caused by the chimney of its elevator, Chas. Wolohan, Inc., replaced the chimney with a new tile-lined brick one.

Durand, Mich.—Durand Milling Co. has installed a Blue Streak Hammer Mill with direct-connected 30-h.p. Fairbanks-Morse Motor, and a built-in electro-magnetic separator.

Wixom, Mich.—The Wixom Co-op. Ass'n is building a garage and filling station of concrete block construction about 50 feet south of the elevator. The ass'n also operates a bulk oil station.

Shelby, Mich.—The business of the Shelby Flour Mills is being continued by the heirs of Mr. Fogelsonger and his partner, A. L. Near, following the death of Mr. Fogelsonger in December.

North Branch, Mich.—The Wallace & Morley elevator at this station has recently been equipped with a corn sheller and a crusher, both machines being operated by 10-h.p. fully-enclosed electric motors.

Caledonia, Mich.—The local elevator of French & Co., of Middleville, is being entirely rewired, using conduit wiring, and new starters which include overload protective devices are being supplied for the motors.

Pigeon, Mich.—The Pigeon Co-op. Elvtr. & Milling Co. has added new equipment to its plant, consisting of a Sidney Truck Dump, a grain separator, a 60-bu. Fairbanks Hopper Scale, a manlift and four fully-enclosed, self-ventilated electric motors.

Wayne, Mich.—Harry Goodman has installed an electro-magnetic separator ahead of the feed mill at his plant, a corn cracker and grader, a corn sheller with pneumatic elevator for cobs, and an additional elevator leg as well as two or three additional electric motors.

Traverse City, Mich.—The rear of the Grand Traverse Milling Co.'s plant was destroyed by fire early Sunday morning, Jan. 17; loss, approximately \$27,000. The building had just been completely rebuilt and brought up to date. The new bean mill was not badly damaged.

Leslie, Mich.—A Gruendler Hammer Mill driven by a 50-h.p. direct-connected motor and equipped with an electro-magnetic separator has recently been installed in the plant of the Leslie Grain & Produce Co., operated by McLaughlin, Ward & Co., Jackson. A feed mixer has also been installed.

Mt. Pleasant, Mich.—The Harris Milling Co. has recently installed a machine, for packaging small sacks of flour, driven by fully-enclosed electric motors. Also installed was a hot air furnace with a triple burner natural gas heating unit. The furnace provides for air conditioning and is controlled by a heat regulator.

Ithaca, Mich.—Frank B. Walcott, head of the Ithaca Elvtr. Co. and brother of A. E. Walcott, sec'y of the Michigan Bean Shippers Ass'n, died Jan. 1. Mr. Walcott took an active part in local civic affairs and also in the bean shippers organization. Following services at the Ithaca Methodist Church, burial took place at Sparta, Mich.

Batavia, Mich.—The elevator at this station which for years has been operated by Dovey Bros. has recently been purchased by Warren Williams, of Bronson, operating as the Bronson Grain Co. The attrition mill is being replaced with a Blue Streak Hammer Mill with a built-in electro-magnetic separator to be driven direct by a 40-h.p. motor.

Tecumseh, Mich.—A fire occurring on Sunday, Jan. 9, damaged the Wm. Hayden Milling Co.'s flour mill to the extent of about \$2,500. Fire was caused by temporary electric wiring improperly installed by a plumber on a new motor-driven furnace stoker. No wiring should be installed in an elevator or flour mill except by a licensed electrician.

Armada, Mich.—The Armada Elvtr. Co. has overhauled its recently purchased mill, and has also installed a seed cleaner and a 2-h.p. motor in one of its warehouses.

Buchanan, Mich.—The Buchanan Co-op. Co. has purchased the Pears East Grain Co.'s feed mill and has completely remodeled it. New equipment consists of a hammer mill with a direct-connected 40-h.p. motor, a Jacobson electro-magnetic separator, a feed mixer, corn sheller and a Kelly-Duplex Crusher. All of the equipment except the hammer mill will be driven by water power.

Chesaning, Mich.—The equipment of the new plant of the Farmers Elvtr. Co. includes a hammer mill with a built-in electro-magnetic separator, a feed mixer, Sidney Corn Sheller, grain and bean cleaners, truck hoist, two bean pickers, bean polisher and a Kelly-Duplex Crusher. All of the motors are of the fully-enclosed, self-ventilating type. All elevator head shafts are equipped with anti-friction bearings.

Jackson, Mich.—A. K. Zinn & Co., headquarters Battle Creek, have remodeled the old milling plant of the Haywood Milling Co. (purchased last summer as reported at the time in the Journals) for a feed mill and general storage plant. Equipment consists of a Blue Streak Hammer Mill, with built-in electro-magnetic separator driven by a 30-h.p. motor, a feed mixer driven by a 5-h.p. motor and a Kelly-Duplex Crusher and Feeder.

Uby, Mich.—Joseph Block, owner of the elevator here that burned, as reported in the Dec. 23 Journals, has bot the Uby Pea Mill from Ben Ellber and is having it remodeled into a bean elevator, which work will be completed in about two months. Grain is being received now and beans bot. A bean mill has already been installed and the plant electrified. The original plan was to rebuild the burned elevator (as reported in the Jan. 13 Journals), but this was abandoned and the pea mill purchased.

MINNESOTA

Welcome, Minn.—The Welcome Farmers Elvtr. Co. has taken out a new charter. The old one dates from 1905.

Anoka, Minn.—The W. H. LaPlant Co. has moved its scales from the feed mill to the store and will close the mill.

Mazeppa, Minn.—The old Hunting elevator, south of the depot, has been sold and will be razed in the near future.

St. Peter, Minn.—Both the St. Peter Feed Mill and the Norseland Feed Mill recently installed new feed mixing machinery.

Emmons, Minn.—Henry Schewe and Edward Hovland, both of Emmons, are reported to have bot the local elevator at a receiver's sale.

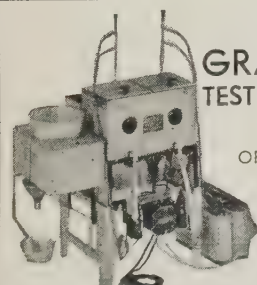
Bongards, Minn.—The Bongards Feed Mill has installed a Howell Daisy Revolving Drum Batch Feed Mixer and a Howell North Star Cylinder Corn Sheller.

Hayfield, Minn.—New roofs and remodeling were taken care of at the Farmers Wholesale Warehouse Elvtr. recently. The T. E. Ibberson Co. had the contract.

Delft, Minn.—The Carson Farmers Elvtr. Co. is putting in new leg equipment, including Howell Boot complete, 40x14 Howell Head Pulley, 8¼-in. well casing-direct spout and new D. P. cups thruout. A new head drive is also being installed.

Minneapolis, Minn.—The new address of the Federal Grain Inspection Dept. is the U. S. Federal Bldg., the department having moved on Jan. 18 from the Flour Exchange. The Federal Bldg. is also known locally as the old Post-office Bldg.

Minneapolis, Minn.—It is reported that approximately 40 employees of the Minneapolis, St. Paul and Duluth grain inspection staffs of the State Railroad & Warehouse Commission may be dismissed as an economy measure, also the seasonal decrease in grain shipments making it advisable.



Complete GRAIN & SEED TESTING EQUIPMENT

OFFICIAL BROWN DUVAL
MOISTURE TESTERS
WT. PER BU. TESTERS
FOUR-IN-ONE SCALES
BOERNER SAMPLERS
GRAIN TRIERS
—SAMPLE PANS

SEED TRADE REPORTING BUREAU

223 W. Jackson Boulevard
CHICAGO, ILL. TEL. WABASH 3712

Michigan Headquarters
Elevator Equipment and Supplies
FLACK PENNELL CO.
Phone 25181 Saginaw, Mich.

Oklee, Minn.—The Oklee Farmers Co-op. Elvtr. Co. recently completed improvements at its office consisting of raising the building about three feet and putting in a full basement, in which is installed a furnace. A new floor has also been laid in the engine room.

Sleepy Eye, Minn.—The feed mill at this station owned by the Eagle Roller Mill Co. is being rebuilt by the T. E. Ibberson Co., New Strong-Scott Combination Feeders and Scalpers are being installed, the present old equipment is being re-installed, and additional bins are being provided.

Minneapolis, Minn.—Changes in the personnel of the Minnesota State Grain Inspection Dept. were made recently as follows: H. A. Dahlquist has been succeeded as weighmaster by V. Steffire; Mons Jerdee, formerly on the board of appeals, has been made chief grain inspector; C. W. Shelly has been transferred from the re-inspection table to the board of appeals, and John Dwyer from re-inspection to chief deputy inspector.

DULUTH LETTER

Grain business continues dull in this market, with traders disposed to refrain from engaging actively in pit trading, with so little cash supplies moving in from the country.—F. G. C.

Notice has been posted for the transfer of membership in the Duluth Board of Trade from E. J. Lindquist to Sheldon Peterson, connected with the Duluth Superior Milling division of the Standard Milling Co.—F. G. C.

In an economy measure the State Railroad & Warehouse Commission discharged F. L. Hanson, chief deputy inspector, and eight other employees recently. Four of the ousted employees charged politics and illegal discharge, and have retained an attorney in a move to force re-instatement. They have filed a protest with the State Railroad & Warehouse Commission. The commission has appointed J. E. Paulsen, supervising inspector of the Duluth office, succeeding F. L. Hanson.—F. G. C.

The Duluth Board of Trade held its annual election for officers Jan. 19. Those elected were: T. F. McCarthy, pres.; Ely Salyards, vice-pres Directors to serve three years: C. C. Blair, R. C. Helm, H. S. Newell; Board of Appeals, R. A. Bissonette, G. P. Harbison, F. E. Lindahl, W. F. Starkey, W. N. Totman; Board of Arbitration: W. W. Bleacher; A. G. Ryan, A. B. Starkey, F. J. Trambley. The two latter tied, so Mr. Trambley withdrew. Ely Salyards, a director, resigned on being elected vice-pres. and a special election will be held Jan. 29 for a successor to fill out his unexpired term, terminating 1938. Nomination of H. J. Atwood, retiring pres., and W. D. Jones has been announced.

MISSOURI

Concordia, Mo.—Concordia Farmers Co-op. Co. closed 1936 as follows: Sales \$285,767, gross gain \$22,024, expenses \$11,969, net gain from operations \$10,054, dividends paid \$1,186 on stock.

St. Joseph, Mo.—The Famo Feed Milling Co. increased its facilities during 1936 from 200 to 800 tons per day. A molasses unit, a pelleting and cubing unit and a new scratch unit were installed, and the mash mixing and corn roll equipment were doubled.

St. Louis, Mo.—On Jan. 15, for the first time in the history of the St. Louis Merchants Exchange, Argentine corn was traded in, on the cash market. Two cars of Argentine No. 2 yellow flint were bought by a St. Louis feed mill at \$1.13 a bushel, or 2 cents lower than the domestic article.

Princeton, Mo.—The fire that destroyed Joe Coon's elevator, reported in the Journals last number, originated in the electric starter.

St. Joseph, Mo.—St. Joseph storage units remain unchanged at 10,452,000 bus. of elevator space. The present wheat milling capacity is 5,500 barrels per day; corn milling, 12,000 bus. per day; oats milling, 2,000 bbls. per day; package goods production, 1,036,800 packages per day; feed milling, 4,740 tons per day.

St. Joseph, Mo.—E. M. Loutch was re-elected pres. and R. E. Wiese was re-elected vice-pres. of the St. Joseph Grain Exchange on Jan. 12. At the election of directors, held the week before, the following were chosen: W. S. Geiger, J. D. McKee, R. E. Wiese, E. M. Loutch and M. U. Morton. The hold-over directors are: A. R. Taylor, C. L. Scholl, H. L. Dannen and H. C. Gregory.

KANSAS CITY LETTER

The L. C. Worth Commission Co., commercial feed manufacturer, is building at its plant a 100x108-foot brick and concrete block warehouse, one story high.

The Kansas City Board of Trade membership of James G. Anderson, of Chicago, has been sold to Otis L. Randall, and that of the late A. J. Poor sold to W. C. Fisher, of the Fisher Grain Co., Hastings, Neb.

Kansas City, Kan.—A law firm has put in a claim for \$25,000 for services in connection with the promotion of the local grain terminal elevator project in Washington, where, the law firm claims, it supported the local mayor, the city attorney and private sponsors before government boards. This latest bill brings to \$30,000 the amount of attorneys' fees claimed in connection with the elevator project.

Pres. D. C. Bishop, of the Kansas City Board of Trade, has made the following appointments: W. R. Scott, sec'y and transportation commissioner; C. W. Pershing, assistant sec'y; H. F. Spencer, treas.; W. W. Marshall, assistant treas.; J. W. Holloway, assistant transportation commissioner; Frank M. Stoll, director of public relations; L. P. North, scale inspector; Carl G. Finster, chief sampler. On the elevator and warehouse committee Pres. Bishop appointed the following: F. A. Theis, chairman; H. C. Gamage and N. F. Noland.

MONTANA

Pendroy, Mont.—Elmer L. Burke, manager of the Rocky Mountain Elvtr. Co.'s elevator here, died last month from a heart ailment. He was about 55 years of age.

NEBRASKA

Big Springs, Neb.—C. A. Fuelscher, who has been operating the Johnson Elvtr. under lease, has now purchased the Farmers Elvtr. Co.'s elevator, and will operate it the coming season.

NEW ENGLAND

Terryville, Conn.—The Bristol Grain & Supply Co., Bristol, Conn., has bought the grain business here of W. E. Wood.

Boston, Mass.—Joseph S. Watson died recently at his home in Somerville. He was associated with the grain and hay firm of C. F. & G. W. Eddy until recently.

Boston, Mass.—The annual meeting of the Boston Grain & Flour Exchange will be held Feb. 2, a luncheon being on the program and guests being invited. Two prominent speakers will be present.

Framingham, Mass.—An incendiary made his fourth attempt in three months, on Dec. 25, to burn the Cutler Grain Co.'s elevator. Firemen extinguished a blaze set beneath the loading platform. The loss was less than \$100.

NEW MEXICO

Roswell, N. M.—Molasses feed equipment has recently been installed by W. T. Clardy.

NEW YORK

Waverly, N. Y.—Fire caused by a short circuit in a small electric transformer in a room used for heating molasses damaged some stock in the plant of the Tioga Mills, Inc., on Jan. 7.

Collins, N. Y.—The James H. Gray Milling Co. will rebuild its elevator and mill recently burned, using modern equipment. A 16-year-old pyromaniac was responsible for two recent fires at this plant, the second one completing the destruction.

North Java, N. Y.—Chas. A. Reisdorf has recently installed an electro-magnetic separator ahead of his feed mill.

Linwood, N. Y.—Electric power has recently been installed in the Boyd Bros.' elevator. The motor is enclosed in a fire-resistive motor enclosure.

Groton, N. Y.—Apparently stricken with a heart attack while driving his automobile, Ray L. Teeter, grain and feed dealer at this point for many years, was found dead at the wheel of his car recently.

Buffalo, N. Y.—Frank J. Stull, well known in the grain and feed trade, associated with the Francis Perot Sons Malting Co. for 50 years and its manager for 28 years, died from a heart attack on Jan. 20, at the age of 63 years.

New York, N. Y.—Theodore P. Huffman, founder of Theodore P. Huffman & Co., grain, feed and hay merchants of this city since 1882, died at his home in Newark, N. J., where he had resided for over 50 years, on Dec. 30, from a heart attack. Mr. Huffman, who was 80 years of age, was a member of the New York Produce Exchange.

Cobleskill, N. Y.—The loss sustained by the Cobleskill Milling Co. when fire damaged its feed mill and storehouse on Dec. 25, as reported in the Jan. 13 Journals, was estimated at about \$20,000. In the mill at the time of the fire were 340 tons of dairy feed, a small part of which was removed during the fire. Loss to building and contents was well covered by insurance. Rebuilding is in progress.

Derby, N. Y.—L. A. Hazard & Sons have replaced a wooden structure, that burned last June, with a new fireproof building, 35x80 feet, constructed with concrete blocks and having steel windows and roof and provided with a 30x35-foot basement at track level. A fireproof partition and door separate the feed mixing room, which is 30x35 feet, from the warehouse, which is 35x50 feet.

Geneva, N. Y.—The Geneva Milling Co. has been re-organized and will operate hereafter as the Finger Lakes & Hudson Flour Mills, Inc. The company has purchased the former C. C. Davison Milling Corp.'s plant. Contract for the erection of a 100,000-bu. elevator has been given to Chalmers & Borton, construction to be of steel and concrete and to consist of two rows of three tanks each. The flour mill is being remodeled and when completed in the spring or summer will have a daily capacity of 1,200 barrels. Work on the elevator is well under way.

NORTH DAKOTA

Enderlin, N. D.—F. J. Bonn is the new manager of the Atlantic Elvtr. Co.'s elevator here.

Grand Forks, N. D.—The Farmers Grain Dealers Ass'n of North Dakota recently admitted to membership the City Elvtr., of Williston, N. D.

Mylo, N. D.—The Osborne-McMillan Elvtr. Co., whose elevator burned in December, as previously reported, has bot the Mylo Grain Co.'s elevator.

Sharon, N. D.—An overheated engine in the elevator of the Sharon Farmers Elvtr. Co. caused a fire which slightly damaged the property on Dec. 29.

Ray, N. D.—Dennis O'Connell, 60 years of age, manager of an elevator here, was accidentally killed by an automobile, which skidded on the icy street, Dec. 25.

Sherwood, N. D.—Hans Horgen, former manager of the elevator of the Riebe Grain Co. at this point, has been sentenced to one to five years for embezzlement and is now doing time. Several charges of embezzlement were preferred against him following the burning of the elevator in 1935. He confessed to having written checks for grain not received and depositing the checks to his personal account. The state's attorney, fire marshal's department and the special investigator of the Mill Mutual Inc. Cos. uncovered the theft.

ELLIS DRIERS

Known the world over for reliability and perfection of product. Direct Heat — Indirect Heat — And Steam Heat. Also . . .

A complete line of Rotary Driers and Feeders for mill and feed plants.

The Ellis Drier Co.

2444-56 N. Crawford Ave.

Chicago, Ill., U. S. A.

Official Brown-Duvel

MOISTURE TESTERS

and a complete line of grain and seed testing equipment. Every item guaranteed up to government specifications.

HARRY B. OLSON

ASHLAND BLOCK

CHICAGO, ILL.

OHIO

DeLisle (Arcanum p. o.), O.—The Snell Elvtr. has been sold to V. E. Herter & Co., of Dayton, O., at administrator's sale.

Haviland, O.—The elevator of the Haviland Grain Co. was broken into and robbed of clover seed valued at \$300, during the night of Jan. 5.

Van Wert, O.—Fire reported as probably originating from a defective flue slightly damaged the office building of Johnson & Gilliland on Jan. 16.

Bolivar, O.—The Tusco Farm Buro has bot E. N. Troyer's 20,000-bu. elevator here. It is reported that Mr. Troyer may buy a feed and flour mill.

Warren, O.—The National Grain & Malt Co., of Jersey City, N. J., is reported to be considering the purchase of the former Fleischmann Yeast Co.'s plant here.

Forest, O.—Having taken over the full ownership of the Forest Flour Mills, I will continue business at the same place under the name of S. H. Poling. I am a successor to Ash & Poling, and also Poling & Latham.—S. H. Poling.

Logan, O.—While attempting to replace a belt in the plant of the Keynes Milling Co. recently, Don Edwards was caught in the belt and thrown several feet, receiving serious injury.

Buchwalter (Jeffersonville p. o.), O.—Improvements recently made at the elevator of the Sedalia Grain & Lbr. Co. include installation of several large motors, magnetic starters and V-rope drive purchased from the Sidney Grain Mch'y. Co.

Cleveland, O.—The Bailey-Cain Co., incorporated recently, has succeeded to the business of E. I. Bailey, long engaged in the grain and feed business here. Frank C. Cain, who has been with Mr. Bailey for years, is vice-pres. of the new corporation.

Toledo, O.—The death of George E. Roether, superintendent of the East Side Iron Elvtr. Co. for the last 19 years, occurred on Jan. 3, following a short illness. Mr. Roether, who was 65 years of age, had been associated with the elevator for 38 years.

Toledo, O.—Sam L. Rice has been re-elected pres. of the Toledo Board of Trade; A. C. Hoffman is first vice-pres.; W. E. Savage, second vice-pres.; A. E. Schultz, sec'y; W. A. Boardman, treas. Joe P. Lackey, H. W. Applegate and A. E. Trost are the new directors.

Toledo, O.—A cash grain department on the Toledo Board of Trade for Hulburd, Warren & Chandler, of Chicago, has been established by Oscar Slosser, formerly with the Mennel Milling Co., of this city, previous to which connection he was regional manager of the Farmers National Grain Corp.

Groveport, O.—The Farm Bureau Co-op. Ass'n, Columbus, has purchased an ear corn crusher, corn cutter and grader and other equipment from the Sidney Grain Mch'y. Co., to be used at its elevator at Groveport; a 1-ton Sidney Kwik-Mix at the Richland Co. Farm Bureau at Lexington, O., and a 1-ton Sidney Special for Washington County Farm Bureau at Marietta, O.

OKLAHOMA

Gansel (Perry P. O.), Okla.—The Gansel Co-op Elvtr. Co. sustained fire loss at its elevator last month.

Weatherford, Okla.—The White Grain Co. is the successor to the White Lbr. Co., which previous to 1914 dealt in lumber, but since that time has been a grain company.

Nash, Okla.—The fire at the Enid Terminal Elvtr. Co.'s elevator, reported in the Jan. 13 number of the Journals, is reported to have been caused by an electrical surge.

Sayre, Okla.—Alba Paddock has leased the old McGrath elevator, which he will operate as the Paddock Grain Co. The house has been remodeled and repaired, the formal opening of the elevator being held Jan. 9. E. C. Simmons, father-in-law of Mr. Paddock, is manager.

PACIFIC NORTHWEST

Silvana, Wash.—A small frame warehouse belonging to the Silvana Grain Co. was burned from exposure on Jan. 4. No insurance was carried.

Colfax, Wash.—S. A. Weitman, of Thornton, is erecting a feed and flour mill here which he expects to have in operation before next harvest.

Portland, Ore.—The Northwestern Feed Co., organized last spring, has been turned over to the Portland Retail Credit Adjustment Buro for the benefit of its creditors, and its plant closed.

Portland, Ore.—Effective Feb. 1, fees of the state grain inspection department will all be raised, the reasons causing the raise being given by Charles W. Wright, division chief, Dept. of Ag., as follows: Decline in export trade, now reduced to virtually none at all; loss of revenue due to two strikes within the past two years; the six-hour day; the state tithing bill of 10% of the gross revenue of the department, and other conditions beyond the control of the state department.

Olympia, Wash.—A proposed commission merchants' act has been agreed upon by the agricultural trades. Dealers will be required to pay a license fee of \$25 a year, commission merchants a fee of \$25 and to give bond, solicitors of dealers and agents \$2 a year. Licensees will be required to file reports on their volume of business with the director of agriculture. On complaint by consignor and after hearing the director of agriculture may revoke the license, subject to court review. A fine of not less than \$50 is provided for violation of the act.

Salem, Ore.—A bill sponsored by the Eastern Oregon Wheat League provides that if employers and employes get into wage disputes or other employment difficulties that might lead to a strike or a lockout, they will be bound to notify the state board of conciliation and request the board's services in bringing about a settlement. While the dispute is pending before the board no picketing will be allowed. Any violation of the law will be punishable by a fine of not to exceed \$100 or a jail term not to exceed 60 days, or both.—F. K. H.

Olympia, Wash.—To preserve the wheat markets of Washington farmers in the Southeastern States, the senate has passed a bill appropriating \$3,000 to send representatives of the state department of public service to a hearing of the Interstate Commerce Commission in Atlanta, Ga., starting early next month. The bill had already passed the house and now goes to the governor for his signature, which will make it a law. The state representatives will oppose heavy reductions on freight rates for Middle Western grain into the Southeast and increases on wheat shipped from Gulf of Mexico and South Atlantic ports.—F. K. H.

PENNSYLVANIA

Atlantic, Pa.—Fire of undetermined cause destroyed the mill building and contents of the Atlantic Feed & Supply Co. on Jan. 15.

Everett, Pa.—A voluntary petition in bankruptcy was recently filed by Thomas Lee Perrin, Sr., operator of a flour mill at this point. Liabilities were listed at \$9,545 and assets at \$5,000.

Kinzers (railroad name Kinzer), Pa.—A fire loss of \$13,000 was sustained by W. J. L. Walker, pres. of the Gap National Bank, in the destruction of his grain and feed warehouse here on Jan. 14; partly insured.

Philadelphia, Pa.—The nominating com'tee of the Commercial Exchange has named the following officers and directors to be voted on at the election Jan. 26: Pres., Louis G. Graff (present incumbent); vice-pres., Albert L. Hood; treas., Philip R. Markley. Directors (six to be elected): Alfred J. Ball, L. R. Holmes, William F. Hyland, E. D. Hilleary, S. G. Horan and Alan Levin.

SOUTH DAKOTA

Centerville, S. D.—Gunderson Bros. & Co. have taken over the grain business formerly conducted by T. I. Gunderson, and will operate it in the future.

Rapid City, S. D.—The death of F. E. McMahon, who founded the McMahon Co., occurred recently. The company operates grain and feed plants here and at Sturgis, S. D.

SOUTHEAST

Swainsboro, Ga.—J. J. Pilcer, of Wrens, Ga., will build a flour mill at this point, it is reported.

LABOR strikes—murders—wars—kidnaping—dictators—communism—nations “arming to the teeth”—and America has her share of these crimes and idiocies. Bad enough—but let's continue to be builders—optimists and dreamers. Sure we've thievery and graft—braggarts out to bully labor and capital—tricksters out to change our form of government—“war dogs” and other criminals—but drive 'em all to cover. Make America “safe for democracy”.

LOWELL HOIT & CO.

Roanoke, Va.—A meeting of the Piedmont Millers Ass'n will be held in this city, at the Patrick Henry Hotel, on Feb. 12.

Tasley, Va.—Peninsula Milling & Feed Co., incorporated; capital stock, maximum, \$15,000; to manufacture feed, flour and other grain products.

TENNESSEE

Morganton (r. d. Greenback), Tenn.—C. H. Cochran's mill, known as the Morganton Flour Mill, burned recently. No insurance was carried.

Memphis, Tenn.—The Memphis Merchants Exchange held its annual election on Jan. 9 and re-elected W. H. Jasspon, pres., and W. A. Hall, vice-pres. Four of the eight directors chosen were from the grain and feed trades.

TEXAS

St. Jo, Tex.—J. K. Seibold and Roy W. Hutchons have just opened a fully equipped feed mill and feed store here.

Happy, Tex.—The Myers Milling Co. is the name under which F. E. Myers will conduct the business of the former Happy Mills, which he has taken over.

Bushland, Tex.—Installation of molasses feed equipment is one of several improvements made recently at the elevator and feed mill of the Bushland Elvtr. Co.

Crowell, Tex.—Hubert Brown has bot the T. P. Duncan & Son elevator and mill here, and is now operating the plant under the name of the Foard County Mill. The capacity of the elevator is 60,000 bus.

Crowell, Tex.—The Farmers Co-op. Elvtr. Ass'n has appointed S. T. Crews manager of its elevators at this point and at Foard City, succeeding Hubert Brown, resigned, now operating his own elevator.

WISCONSIN

Ashland, Wis.—The Hanson Milling Co. (feed and flour) has changed its name to the Arthur J. Hanson Co.

New Glarus, Wis.—New Glarus Feed & Fuel Co. has installed a large seed cleaner purchased from the Sidney Grain Mch'y. Co.

Jefferson, Wis.—Spangler Bros. recently purchased a cleaner with a large number of screens from the Sidney Grain Mch'y. Co.

Superior, Wis.—A mill to grind and mix feed for the co-operative stores in upper Wisconsin is planned by the Central Co-op. Wholesale.

Milwaukee, Wis.—The rate of interest for February has been determined by the finance committee of the Milwaukee Grain & Stock Exchange at 5%.

Jefferson Junction, Wis.—A. L. Bisch, of Milwaukee, has been made superintendent of the Ladish-Stoppenbach Malting Co.'s plant, succeeding the late Edward Bienfang.

WYOMING

Powell, Wyo.—A new 500-barrel flour mill will be built by Ray Loving, whose small mill burned recently.

National Rules to Cover Soybeans

The trade rules com'tee of the Grain & Feed Dealers National Ass'n is considering a change in the rules to include soybeans as a grain, thus making the arbitration rules applicable to transactions in soybeans.

Two-thirds of the Board of Directors can make the change effective prior to action by the members in convention.

Evils of Blending Foreign Clover Seed

By E. A. HOLLOWELL, U. S. Dept. of Agriculture.

Mixing and blending of foreign with domestic seed affects the red clover yield in two ways: first, the immediate effect on the yield brought about by the mechanical mixture of unadapted and adapted seeds and, second, the polluting of desirable plant characters with the inferior characters of the foreign seed. This is certain to occur because the red clover plant is self-sterile and cross pollination is necessary before seed will be produced.

If adapted domestic red clover seed is not available there are other legume and grass mixtures which can be grown in its place. Mixtures such as alfalfa, red clover, alsike and timothy; red clover, alsike, timothy, and other grasses may be used instead of pure seedings.

No doubt there will be heavy seeding of foreign seed this spring. But the decision to take a chance rests with the farmer, who should realize that foreign unadapted seed is not an alternative in harmony with sound practice.

Washington, D. C.—Packers have built up the largest reserve stocks of meat in cold storage on record, except for 1919 and 1920. The Jan. 1 report of the Department of Agriculture showed more than a billion pounds of meat held in storage, compared with a reserve of only 510,388,000 pounds a year ago on that date.

Washington, D. C.—Unemployment compensation laws recently adopted by the states of Oklahoma, North Carolina, New Mexico, and Virginia were approved Dec. 19 by the Social Security Board as meeting the requirements of title IX of the Social Security Act. Approved state unemployment compensation laws, including the District of Columbia, now number 23.

The Government agreed Dec. 28 to make no attempt to collect windfall taxes in the suit by the Sheridan Flouring Mills, Sheridan, Wyo., while the Supreme Court is considering whether to grant an appeal from the decision of the Court of Appeals at Denver denying an injunction to restrain collection. The theory of the appeals court is that the milling company should pay the tax and then start suit to recover the payment.

Supply Trade

Chicago, Ill.—B. I. Weller announces the appointment of the John S. Metcalf Co. as sales agent for Calumet Elevator Cups for the whole of South America.

Milwaukee, Wis.—Stearns Magnetic Mfg. Co. has just published Bulletin DH describing a recently developed drum-type magnetic separator for purifying dry material.

Wm. H. Davey, who built the first grain elevator in the Red River Valley, died recently at the age of 92. This elevator, built of logs, is still standing at Hendrum, Minn.

Wilbur, Wash.—The Columbia River Milling Co. has been compelled to close because strike conditions on the Coast have made it impossible to get sacks. Plans are being made for shipment of bags from the east.—F.K.H.

Sidney, O.—The Sidney Grain Machinery Co. has purchased the friction clutch and power transmission business of the Minster Machine Co., and will manufacture the equipment in its plant here. The line includes friction clutches, bearings, hangers, belt tighteners, etc.

Harrison, N. J.—Effective Jan. 1, the Worthington Co., Inc., with offices in Seattle, San Francisco, Los Angeles and El Paso, was absorbed by its parent organization, Worthington Pump & Machinery Corp. This announcement follows that of Dec. 28, covering the absorption by Worthington of its subsidiary, Carbondale Machine Corp.

Will say this for the grain dealers, they are like farmers, with a little show of raising crops and making money they are hopeful. I believe there was more money spent in betterment of plants in 1936 than there was in all the years from 1933 to 1936, and there are a good many projects under way now for improvements this year.—Goodrich Bros. Co., P. E. Goodrich, Pres.

Chicago, Ill.—Fairbanks, Morse & Co. has just issued an attractive booklet, "Fairbanks-Morse Diesels," which illustrates and describes present models in the complete line of F-M Diesel engines. An introduction traces briefly the development and explains the operation and uses of Diesels. Along with the illustrations and discussions of operating features of the various F-M models are given applications in various services; in some cases typical installations are pictured and described. A copy of this booklet will be sent to Journal readers who write the company.

Books Received

CENTURY OF BUSINESS PROGRESS CHART maps the ups and downs of American business for the past 100 years, the course of commodity prices, and for 75 years the movement of stocks and bonds. Controlling factors are diagrammed. Printed in 6 colors on substantial paper 48 inches wide, with explanatory text. The Century Press, Toledo, O. Price, \$1.

PIONEERING A NEW INDUSTRY, a history of the A. E. Staley Mfg. Co.'s soybean division, is prefaced with a print of A. E. Staley, who pioneered the extensive production of soybeans in Illinois, and promoted soybean processing in the 1920s. This brief volume of two dozen pages reviews soybean production to the present, the development of soybean processing, new products, research and sales promotion, and shows a number of maps visualizing the spread of soybean growing by counties. Issued by A. E. Staley Mfg. Co., Decatur, Ill.

Improved Duplicating Grain Tickets

Use of Form 19GT as a scale book saves much time and labor as one writing with the use of carbon gives a complete record and at the same time, a ticket for the hauler.

Each of the 125 original leaves bears four scale tickets, is machine perforated, printed on white bond, size of tickets 3x6 $\frac{3}{4}$ inches. The 125 duplicates are printed on manila, but not perforated. Check bound at top of tickets with hinge top cover, 500 tickets in each book arranged horizontally. Each book 7 $\frac{1}{2}$ x12 inches. 250 leaves with 5 sheets of carbon.

Each ticket has spaces for following record: "Owner, Hauler, Grain, Grade and Dockage, Gross, Tare, Net, Total Dockage, Net Pounds, Bushels, Price and Amount, Storage Ticket No., Station Ticket No., and Date, Weigher, Name of Firm or Buyer." Order Form 19GT Duplicating. Price \$1.20 plus postage.

Triplicating is the same form as 19GT described above with 125 sheets strong white tissue for buyer, bound in between the original tickets for hauler and the duplicate for headquarters so as to make three copies with one writing. Five sheets dual faced carbon. 375 leaves, weight 3 lbs. Order 19GT Trip. Price \$1.65 plus postage.

GRAIN & FEED JOURNALS

Consolidated

332 So. La Salle St.

Chicago, Ill.

Railroad Claim Books

require little of your time for filing, and contain spaces for all the necessary information in the order which assure prompt attention on the part of the claim agent. They increase and hasten your return by helping you to prove your claims and by helping the claim agent to justify payment.

A is for Loss of Weight in Transit Claims.
B—Loss in Market Value Due to Delay in Transit.
C—Loss in Quality Due to Delay in Transit.
D—Loss in Market Value Due to Delay in Furnishing Cars.
E—Overcharge in Freight or Weight.

These claim blanks are printed on bond paper, bound in book form, each book containing 100 originals and 100 duplicates, a two-page index, instructions and summary showing just which claims have not been paid, and four sheets of carbon.

The five forms are well bound in three books, as follows:

411-A contains 100 sets all Form A. Price, \$2.00. Weight 3 lbs.

411-E contains 100 sets all Form E. Price, \$2.00.

411-5 contains 60 sets Form A, 10 Form B, 10 Form C, 10 Form D and 10 Form E. Price, \$2.00.

Grain & Feed Journals

CONSOLIDATED

332 South La Salle St. Chicago, Ill.

Patents Granted

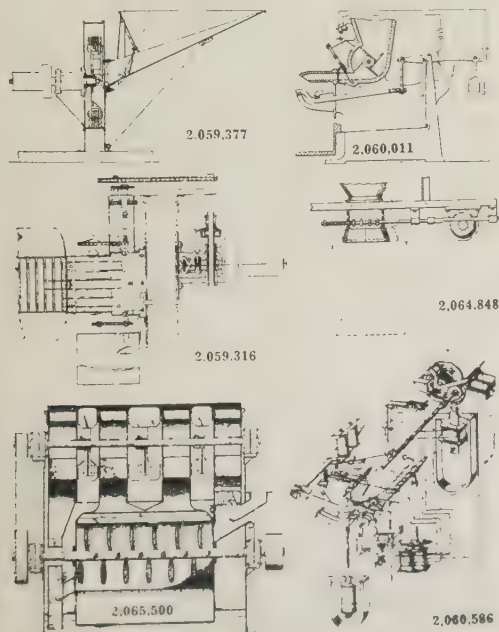
2,059,316. Hammer Mill. Chas. F. Crumb, Batavia, and Merrill W. Roscoe, Chicago, Ill., assignors to International Harvester Co. A screw conveyor in the bottom of the feed housing is disposed at substantially right angle to the roughage feeder and directly below the feed rollers for moving other material thru the auxiliary feed opening into the drum to be ground and mixed with the roughage.

2,059,377. Grinding Mill. Raymore D. MacDonald, Western Springs, Ill., assignor to International Harvester Co. The reducing chamber contains a rotor carrying a knife, a feed hopper including a throat portion and a sloping bottom for feeding material to a feed opening in the chamber, said bottom having its low end adjacent to the feed opening, a shear bar in said throat co-operating with the knife to cut cobs, with a baffle mechanism in the hopper.

2,060,586. Automatic Ticker-Tape Feed-Out. Percy L. Myer, Ozone Park, N. Y., assignor to the Western Union Telegraph Co. An auxiliary pawl co-operates with a ratchet to advance the tape a predetermined distance whenever printing mechanism has ceased to function for a predetermined interval, a timing device for measuring said interval, means co-operating with timing device for automatically causing the co-operative engagement of auxiliary pawl with ratchet upon the completion of said interval.

2,064,848. Bag Holding Device. Jacob J. Neuman, South Salem, N. Y. A bag holder, comprising separable holding members for insertion in the mouth of a bag, and cushion elements carried on the outer sides and lower ends of said holding members, each of said cushion elements comprising a body part of sponge rubber and a flexible covering therefor, and said cushion elements increasing in cross sectional area from the upper to the lower ends thereof for stretching the bag at a point below the mouth edge thereof and adapted to conform to inequalities in the bag to distribute the friction contact surfaces between the cushion elements and the bag over a relatively large area.

2,060,011. Bag Filling Machine. Arno Andreas, Munster, Germany, assignor to Bagpak, Inc., New York. The machine comprises a hopper, a propeller housing, a constantly rotating propeller therein for feeding material, and valve bag supporting means including a spout adapted to enter the bag and thru which material enters the bag, weighing mechanism including a balance arm, a valve for cutting off the flow of material into the spout, means to close said valve controlled by the weighing mechanism, and means to continuously interconnect said bag supporting means with the balance arm



during the filling operation, said interconnecting means including a lever arm interposed between bag supporting means and balance arm and constructed and arranged so that the effective moment arm of the bag supporting means is greater than the effective moment arm of the balance.

2,065,500. Grain Scouring and Cleaning Apparatus. Alexis C. Barbeau, Silver Creek, assignor to S. Howes Co., Silver Creek, N. Y. A machine for scouring and cleaning kernels of grain comprising a horizontal casing provided at its front end with a grain inlet for admitting into the casing the grain to be scoured and cleaned, at its rear end with a grain outlet for discharging the treated grain from the casing, in its bottom with a plurality of openings for admitting air into the casing, and at opposite ends of its top with air and dirt outlets; means for agitating and beating the grain in the casing so as to lift the kernels and suspend them in the air and also strike the kernels while suspended for detaching dirt therefrom; an individual suction fan having inlet eyes on its opposite sides connected respectively with the outlets in the top of the casing; a grain feed spout leading to the grain inlet of said casing, a grain discharge spout leading from the grain outlet of said casing, and separate suction fans having their inlets communicating respectively with feed spout and discharge spout.

Would Disrupt Farmers National

Resolutions adopted by the stockholders of the Farmers Union Terminal Ass'n meeting Dec. 9 at the Hotel Lowry, St. Paul, Minn., expressed dissatisfaction with the Farmers National Grain Corporation of which the Union is one of the several regional components.

Altho operating in full blast as a going concern for many years with the aid of government money this creation of the Hoover Farm Board has not been able to pay members any substantial profits from handling grain; and in the future members will find themselves assessed to keep the concern going, thru the medium of deductions from the sale price of their grain described as "retains."

The resolutions demanded return of marketing functions of the Farmers National Grain Corporation to individual regional grain co-operatives.

Criticisms of the Farmers National, included in the resolution, were that it had become autocratic and dictatorial, and that it no longer serves the best interests of the individual grain growers who market co-operatively.

Under the plan advocated, the Farmers National would become purely a service organization, conducting marketing and crop surveys, acting as a legislative instrument and assisting in financing and economic problems of individual co-operatives. The resolution offered co-operation of the Farmers Union Terminal Ass'n to other similar co-operatives in effecting the change.

Under domination of M. W. Thatcher, it is said, the Farmers Union was thrown into the Farmers National organization, and Mr. Thatcher was rewarded by a lucrative job as lobbyist at Washington.

Britain Would Store Wheat

The new food defense department of the government announced Jan. 12 that the accumulation of huge reserves of wheat would be placed before parliament.

Experts said Great Britain would need to store 3,650,000 tons of wheat for a full year's reserve. Major Nelson Rooke says that storage for 6 months' supply of bread and meat is a fundamental necessity.

Objections to the program are that storage room is not available, and with England in command of the seas accumulation would not be necessary.

Supply of labor in rural areas was the smallest for Jan. 1 since 1927, reports the Dept. of Agriculture.

Confirmation Blanks

Simple - Complete - Safe

If you would avoid trade disputes and differences, and prevent expensive errors, use triplicating confirmation blanks. You retain tissue copy, sign and send original and duplicate to customer. He signs and returns one and retains the other.

This places the entire burden for any misunderstanding of your intentions upon the other party and protects you against the expensive misinterpretation of your trades.

The use of these confirmations makes for safer business. Spaces are provided for recording all essential conditions of each trade.

Fifty confirmations in triplicate, bound with pressboard and wire stitched, size 5½x8". Order Form No. 6 CB. Weight, 9 oz. Price 75c; three copies \$2.00, plus postage.

Grain & Feed Journals

CONSOLIDATED

332 South La Salle St., Chicago, Ill.

Grain Contracts with Farmers

Form 10 D. C. is recognized as the best for contracting grain and seed from farmers, and is in extensive use by grain dealers. Do not take chances with verbal contracts. They lead to misunderstandings, differences and disputes, as well as loss of profits and customers. Contract certifies that farmer:

"has sold.....bushels of.....at..... cents per bushel, to grade No....., to be delivered at.....on or before..... It also certifies that, "if inferior grain is delivered, the market difference at which such grain is selling on day of delivery shall be deducted. Any extension of time at buyer's option."

Originals are printed on bond paper, machine perforated so they may be easily removed; duplicates are of manila. All have spaces ruled on the back for recording each load delivered on the contract. Check bound, size 5½x8½ inches, 100 sets numbered in duplicate and supplied with 4 sheets of carbon paper. Order Form 10 DC Improved. Price \$1.10, f. o. b. Chicago. Wt. 1 lb.

Triplicating book is same as 10 DC and contains 100 additional copies of the contract printed on strong tissue and 4 sheets of dual faced carbon. Order Form 10 TC. Price \$1.35, f. o. b. Chicago. Weight, 21 ozs.

Grain & Feed Journals

Consolidated

332 So. La Salle St. Chicago, Ill.

Field Seeds

Boone, Ia.—The Earl E. May Seed Co. has re-opened its retail store here, with F. E. Edgerton in charge.

Malone, Wis.—Dewey Beyer has installed a seed cleaner recently purchased from Sidney Grain Machinery Co.

Perry, Ia.—Clarence Gottschalk has re-opened the Mid-West Seed Co. store which he owned and operated.

Sacramento, Cal.—About \$30,000 worth of damage was suffered by F. Lagomarsino & Sons Seed store in a fire Jan. 11.

Iowa Falls, Ia.—The Earl E. May Seed Co. has rented the Ellsworth building, in which it will open a new store soon.

Shenandoah, Ia.—All employes of the Henry Field Seed Co. were given a Christmas present bonus of a full week's pay.

Fort Dodge, Ia.—The Henry Field Seed Co. has moved its local farm and garden seed branch to the Gamble Storage. L. W. Doty is manager.

Marshalltown, Ia.—Farmers & Merchants Supply Co. is the name of a new wholesale and retail seed and feed store managed by J. A. Breon.

Grinnell, Ia.—The Farmers Produce Co., co-managed by Floyd Stanley and A. L. Clevenger, has entered the wholesale and retail seed, feed, and produce business here.

Madison, Wis.—Alfalfa, legumes and winter wheat are being damaged by the ice coating, and more seed will be required for replanting.—R. L. Lang, Olds Seed Co.

Winchester, Ind., Jan. 9.—Clover seed demand is very active. Looks as tho the stocks in this part of the country would be cleaned up before Mar. 1.—P. E. Goodrich, Goodrich Bros. Co.

Chicago, Ill.—The Albert Dickinson Co. is gradually working out of its 77-B bankruptcy, by doing an increasing business and renting out some of the space of which it had a great surplus.

New York, N. Y.—December receipts of flaxseed were 656,960 bus., compared with 568,680 bus. in December, 1935. December shipments of clover seed were 2,364 bus., compared with 5,814 bus. in December, 1935.

Lewisville, Ind.—Floyd Hiner, 36, was winner of the grand sweepstakes in the corn and small grain show at Purdue University's annual agricultural conference. He exhibited 10 ears of Reid Yellow Dent corn.

Manitowoc, Wis.—The M. G. Madson Seed Co. has filed articles of dissolution, having been inactive for a few years. It was organized 40 years ago by M. G. and Cornelius Madson. Its 3-story office and warehouse was recently razed.

Directory

Grass and Field Seed Dealers

CRAWFORDSVILLE, IND.
Crabbs, Reynolds, Taylor Co., clover, timothy.

GREEN SPRINGS, OHIO
The O & M Seed Co., seed merchants.

PAULDING, O.
Stoller's Seed House, wholesale field seeds.

ST. LOUIS, MO.
Mangelsdorf & Bro., Ed. F., wholesale field seeds.
Scott, T. Maurice, field seeds, carlot originator.

SAULT STE. MARIE, MICH.
Soo Terminal Co., grass, flax, peas.

SIOUX CITY, IOWA
Sioux City Seed Co., seed merchants.

The American Seed Trade Ass'n will hold its annual convention at the Statler Hotel, Cleveland, O., June 14 to 17, the executive com'te decided Jan. 24 at its meeting at Chicago. The Farm Seed Group will hold its convention at the same place June 14.

Ogden, Utah.—The 12th annual Inter-mountain Seed Show was held in connection with Ogden's 18th annual livestock show Jan. 8-14. Exhibits included certified and non-certified seeds, grains and commercial entries and mounted samples of weed seeds.

Oklahoma City, Okla.—At the annual meeting of the Oklahoma Seed Dealers Ass'n Frank Keller of Shawnee led a discussion of the federal fair trade practices act. The old officers were re-elected: F. W. Martin, Muskogee, pres.; Frank O'Bannon, Claremore, vice pres.; and H. E. Grisham, sec'y.

Manhattan, Kan.—Buy no seed from itinerant truckers, the state board of agriculture has warned farmers. A sample of oats taken from a truck load of 300 bus. recently offered for sale, was found to contain 75 bindweed seeds to the pound, cited Prof. J. W. Zahnley, of the state seed laboratory, as an example of what truckmen are likely to offer.

Ottawa, Ont.—Nine farmers, five government men and three representatives of wholesalers and seedsmen will sit on the newly created Ontario Seed Board, to advise the department of agriculture on all seed growing and marketing problems. Efforts will be made to develop an efficient distribution system for good, clean seed, true to variety for small growers of registered seed.

Lafayette, Ind.—Several hundred germination tests of seed corn this winter by Purdue agronomists show that not all seed is of satisfactory germination. Many samples tested would not germinate more than 90 per cent and a few ranged from 50 to 70 per cent in germination. Seed in southern Indiana counties is likely to be in better condition than that in the northern two-thirds of the state, but Beeson says that it is evident that germination has been reduced wherever the corn has carried more than 30 per cent of moisture and was not protected from the low temperatures during the last week in October.

Imported Seed Mixtures Violate Law

Mixture of domestic and imported alfalfa or red clover seed violate the federal seed act when sold interstate, whether or not the blending is clearly indicated with a statement on the container, rules the Department of Agriculture in response to dealers' inquiries.

For the protection of agriculturists the seed act requires staining of all imports of alfalfa and red clover seed as follows:

Alfalfa and red clover seed grown in Canada, 1 per cent violet.

Red clover seed grown in Italy, 10 per cent red.

Alfalfa seed grown in Africa, 10 per cent red.

Alfalfa seed grown in Turkistan (Turkistan), 10 per cent purple red.

Alfalfa seed grown in South America, 10 per cent orange red.

Alfalfa and red clover seed of unknown origin, 10 per cent red.

Alfalfa and red clover seed of known origin, not specifically provided for above, 1 per cent green.

Seed Corn Loans Increase

Midwestern farmers had applied for loans on approximately 200,000 bus. of corn at the close of December, said Cecil A. Johnson, in charge of the emergency seed corn loan program. Applications sought loans on 94,000 bus. of seed corn and on 104,000 bus. of field run corn. Iowa farmers alone had applied for loans on 92,000 bus. of field run corn.

The emergency seed corn loan program enables farmers to borrow on farm-stored, selected seed corn in seed deficient areas.

Flax Institute Meeting

The Flax Institute of the United States held its annual meeting Jan. 12 at Minneapolis, the chairman being Dean H. L. Walster, director of the division of agriculture, North Dakota Agricultural College.

The discussion centered on means to increase the acreage of flaxseed where soil and climatic conditions are favorable.

The supply of seed for sowing was reported short. Altho the government has 250,000 bus. of seed it seems impossible to make this available to those who can not pay cash.

Seed Loans Speeded

A house com'te has favorably reported the Jones bill authorizing a fund of \$50,000,000 for seed loans; limited to \$400 per individual except in drouth areas, where approval by the farm credit administration would be reason for increasing the loan. The rate of interest in the proposed bill is 5½ per cent.

Imports of Forage Plant Seeds

Imports of forage plant seeds during December and during the six months prior to Jan. 1, as reported by the Bureau of Plant Industry, have been as follows, in pounds:

	December— 1936 1935		July 1 to Dec. 31. 1936 1935	
Alfalfa	266,000	.....	1,244,600	.....
Bluegrass,				
Canada ...	7,200	33,400	42,300	86,300
Brome,				
smooth	145,900	125,700	454,600	246,600
Clover—				
Alsike	340,100	.....	1,844,800	.....
Crimson ...	166,400	76,700	5,283,300	2,093,800
Red	2,330,500	.....	3,517,600	.....
White	258,600	144,500	835,200	713,500
Grass, orchard	45,600	201,000	1,281,500	235,700
Millet, foxtail	.....	30,000	5,200	280,500
Rape, winter.	227,300	1,273,900	6,617,200	2,580,200
Ryegrass—				
Italian	500	.....	13,800	26,900
Perennial ...	16,200	20,000	434,800	183,500
Timothy	43,700	.....	72,000	600
Vetch -				
Common ...	25,000	.....	79,700	.....
Hairy	252,100	64,300	2,073,600	1,550,400
Oat	34,400	.....	34,400	.....
Bentgrass ...	3,200	.....	6,900	19,800
Bluegrass—				
Annual	2,900	.....	4,400	.....
Rough	75,300	131,100	201,400	261,900
Wood	1,400	300	1,900	1,400
Clover,				
suckling ...	2,200	.....	44,100	45,200
Dogtail,				
crested ...	.....	200	6,900	10,200
Fescue—				
Chewings ..	114,000	111,900	815,100	289,400
Other	1,300	6,200	48,800	45,400
Grass—				
Dallis ....	.....	500	33,300	19,100
Guinea ....	.....	.....	1,100	.....
Molasses ...	.....	.....	2,200	.....
Rescue ....	.....	.....	900	10,600
Rhodes ....	.....	1,000	4,100	2,200
Sudan ....	.....	.....	.....	206,100
Velvet ....	.....	.....	600	2,500
Medick, black	.....	2,000	14,800	31,100
Mixtures,				
grass	1,000	.....	2,500	.....
Sweetclover—				
White	547,600	.....	2,069,400	.....
Yellow	105,700	.....	271,300	.....
Wheatgrass—				
Crested ...	.....	900	59,200	70,900
Slender ...	9,900	.....	97,400	.....

Meeting of Farm Seed Group

The Farm Seed Group of the American Seed Trade Ass'n held its midwinter meeting at the Palmer House, Chicago, Jan. 25 with a large attendance, bent on having a good time and doing much business, in both of which endeavors the record-breaking crowd of 100 was successful.

So intent were the seedsmen on renewing acquaintance and doing business that it was not until 11:10 a. m. that Chairman J. H. Withey of Minneapolis could call the meeting to order.

The session began with a rotary roll call, each member present rising and stating his name and business connection.

SECY JOHN A. SMITH of Toledo read the minutes of the last annual meeting which were approved.

PRES. WITHEY read his address as follows:

Chairman J. H. Withey's Address

Possibly meetings of the Farm Seed Group are unique among trade conventions. Probably at no other meetings is the preponderant part of an important industry represented by relatively so few people with such a variety of individual interests and opinions. Because of these diverse interests and opinions, this ass'n can do little for the individual beyond the opportunity offered by its meetings for personal contacts and open discussion. There are, however, matters of universal importance and common interest which must be approached thru a broad consideration of the welfare of the whole industry. That is the basic reason for the maintenance of this ass'n.

More Regulation by Government.—What is in the future for American business, and for the seed business in particular, no one knows. There appears reason to believe that not only the seed business, but all business, will see more rather than less government regulation or interference. Business groups have always been ready to ask for and accept government regulation and aid where it has been a direct benefit to its own group or a check to competition. History records that almost all government regulation to business, which is now denounced as a burden in so many directions, did not originate with the politician, the farmer, or the public, but from business itself. No less authorities than Charles and William Beard state that if the federal government were to abandon all interference with private enterprise that can be attributed to the insistence of business men and is actively supported by them, its operations would shrink to small proportions.

If you question this statement, study the history of railroad rates, tariffs and shipping regulations for a beginning. I mention this merely to show that in spite of all the talk about getting the government out of business, there are probably just as many business men who want to keep the government in business, and it may be more practical to adapt ourselves to the situation as it exists than to try to change it.

It is not unlikely that the majority of you are favorable to some government regulation of the seed business, if fairly applied within definite limits, but I am sure that all of you would oppose any extension of government control or regulation which would usurp any part of our natural field of activity.

It is a matter of record that any relinquishment of control or operation by business to a government agency as a temporary expediency has resulted usually in a permanent change in the industry far greater than was anticipated or desired.

The seed industry has been fortunate in having two able com'ites who, during the past two years, have spent much time and able effort in endeavoring to bring about a correlation between the fair regulation and the practical operation of your business.

Class Warfare.—There is another problem facing all American business which merits the serious concern and attention of everyone of us. That is the existence and activity in this country of an organized group which apparently has for its purpose the complete destruction of all private enterprise and business. The weapon of this group is class warfare and the creation in the public mind of distrust of private business. You have seen this group in evidence at Washington, you see it in state capitols, and you have heard it on the radio, and you can hear it in the lecture rooms of some of our large universities. It may be that one of the biggest jobs ahead for the seed industry the next few years will be the maintenance and furtherance of public good will and friendship.

The retention and strengthening of public confidence and good will in the seed trade is our responsibility and should continue to be our constant concern.

Dr. R. H. PORTER, head of the Iowa State Seed Laboratory at Ames, Ia., read a paper on "Some Aspects of Seed Analysis and Their Relation to the Seed Trade" in which he recited the history of seed analysis since 1900 and told of gradual improvement and the investment of millions of dollars in seed cleaning machinery by seed firms.

He gave the results of germination tests on sand and on filter paper, showing a great difference in the results obtained.

The amount of moisture present was a determining factor in the germination test.

On sand 318 sprouts were obtained, on filter paper 293, which he said was a significant difference, stressing the necessity of uniform methods of testing.

One sample showed a germination of 96 per cent in orangeade and 83 to 84 per cent in water.

In the fall of 1936 one lot of seed was divided into 64 portions and sent to different laboratories for analysis. Nineteen reports agreed on purity, but there was a great difference in the reported germination.

The meeting adjourned *sine die* at 12:30 for the group luncheon.

Authority to continue using government obligations as backing for federal reserve currency notes was asked of Congress Jan. 8 by Chairman Eccles of the board of governors of the federal reserve system, thus avoiding the possibility of forced sales of government obligations by reserve banks.

Seedsmen and Patman Act

By LANE WILSON, Shreveport, La., before Southern Seedsmen's Ass'n

The legal department of a large paint and insecticide manufacturer, and operator of wholesale-retail stores, has caused them to adjust their system and prices. All goods sold at wholesale are charged their stores at jobber prices and all goods sold at retail are charged them at dealer prices. Their advice is that this is necessary to comply with the Robinson-Patman Law and they have had district and state meetings at the expense of the company, endeavoring to inform their managers of the plan and how to comply.

If a nationwide organization, the largest in its field, goes to this expense in adjusting its price differences to comply with the law in selling its wholesale-retail houses, we might well consider this phase carefully, either as sellers or buyers.

This came to my attention on account of the fact that we happen to be warehousemen and distributors for this firm, and we will be forced, if we continue to job for this firm, to put our house in order, in order to handle this account, in order to be a jobber for them. They have told us that they could not sell us as a jobber if we put it all in the same house, and sold it out of our retail store. It will be necessary for us to run it thru our wholesale department and charge it to our retail department.

My deductions are that firms issuing a jobber price list and selling firms who are bona fide wholesalers, will lay themselves liable under this law, should they send this same price list and sell a retailer on the same basis. Certainly a wholesaler would have recourse to damages, if he could prove that he was sold as a jobber and his prospective retailer customers at the same prices.

If you will permit reference to my own business, I will say we are following the plan outlined as being used by the national concern referred to. Our two wholesale departments, Shreveport and Monroe, will purchase all items which we job and will, in turn, sell them to our two retail stores at

IF IT IS SEED

OATS YOU WANT—

Read—"KNOW WHAT YOU BUY AND SELL" Nov. 11th issue

"WHAT PRICE VICTORY?" Nov. 25th issue
"WHO HAS SEED OATS?" Dec. 9th issue

MARSHALL C. RUMSEY, Batavia, N. Y.
ORIGINAL SVALOF OATS.

T. MAURICE SCOTT

BUYER
FIELD SEEDS

What Have You to Offer?

419 Merchants Exch. Main 2007
ST. LOUIS, MO.

ED. F. MANGELSDORF & BRO.

Buyers and sellers of
Sweet Clover, Alfalfa, Lespedeza, Clovers, Timothy, Grasses, Fodder, Seeds, Sudan Grass, Soy Beans, Cow Peas
St. Louis, Missouri

Rudy-Patrick Seed Company
KANSAS CITY, MO.

BUYERS — SELLERS

Clover, Alfalfa and Timothy Seeds

OFFERS SOLICITED

CRABBS REYNOLDS TAYLOR CO.
CRAWFORDSVILLE, IND.

GRAIN

Clover and Timothy Seeds

Get in Touch With Us

SEEDS

ALL KINDS — ANY QUANTITY

Write, wire or phone our
nearest warehouse.

Dependable Service

SIoux CITY SEED CO.

SIoux CITY, IA.
CARROLL, IA.
ALGONA, IA.
NORFOLK, NEB.

SIoux FALLS, S. D.
FAIRMONT, MINN.
ALBERT LEA, MINN.
BILLINGS, MONT.

YIELD EXCELLENCE UNIFORMITY DEPENDABILITY

A feeling of confidence goes with the planting of

O. & M.

FIELD CORN • SWEET CORN
SEED OATS • SEED BARLEY
GARDEN SEED • GRASS SEED

Write for catalog and prices

The O. & M. SEED CO.
GROWERS — GREEN SPRING, O.

dealer prices. Our retail stores will be required to add their profit to dealer prices the same as any other retailer. Since we operate separate establishments at both places, this can unquestionably be worked out.

New Varieties of Yellow Corn

By A. D. JACKSON of Texas Ex. Sta.

Four new yellow corn varieties, Yellow Surecopper, Golden Thomas, Yellow Tuxpan and Golden June are now available to farmers who wish to replace their old adapted white varieties with yellow corn of a high vitamin potency. A ten year breeding program at the Texas Experiment Station designed to introduce yellow color into well established and productive white Texas varieties is nearing completion and seed of the new yellow types is now available to farmers thru seed growers and seedsmen.

Last spring the station distributed the first seed of Yellow Surecopper, Golden Thomas and Yellow Tuxpan, about 100 bushels of each, and the crop from this initial distribution is available as certified seed through seedsmen and seed growers. This year the station will have several hundred bushels of registered seed of Yellow Surecopper at College Station and an equal amount of Golden Thomas at Beeville for distribution to seed producers, at a nominal price to defray the expense of increasing it. Yellow Tuxpan may be purchased from seed growers in the Gulf Coast Region and Golden June, distributed for the first time this fall, is available in very limited quantities at College Station and at the Texas substations at Chillicothe and Lubbock.

Records secured by Dr. P. C. Mangelsdorf who has supervised the corn breeding program for the Station, show that Golden June, like Mexican June, is adapted to the western half of the state west of the 30 inch rainfall line and, for late planting, is adapted in all parts of Texas, as well as in parts of Louisiana, Arkansas, and Oklahoma. The Yellow Surecopper is suitable for planting in the less fertile soils and is among the high producing varieties in every part of the state. The Yellow Tuxpan is suitable for the irrigated areas of south and southwest Texas and the heavy blackland of the Gulf Coast Region of Texas and Louisiana, as well as in the Everglades of Florida. Golden Thomas is suitable for the corn growing region of southwest Texas in the vicinity of

Beeville and San Antonio on the non-irrigated lands.

Until the yellow color was bred into Surecopper and other popular varieties of white corn, there were no varieties of yellow corn available in the state that would yield as well as white corn, except on the fertile soils of Central Texas. In fact, the records show that the best white corn varieties yielded about 12 per cent more than the best of the old yellow varieties, and since the high yielding strains of white corn have had the yellow character bred into them with a resulting yellow grain rich in vitamin A, the farmer is able to produce as high yields of yellow corn as he can of white corn.

As soon as farmers learned of the necessity for vitamin A in the rations of their animals, and of the high vitamin A content of yellow corn, there began to be an increasing preference for it, especially among the poultrymen. In fact, the production of yellow corn in the South has been increasing slowly, but the corn grower has been sacrificing some of his yield when replacing white corn with the available yellow varieties. The grower of yellow corn has been losing on the average about $\frac{1}{8}$ of his potential corn crop for the privilege of growing corn of high vitamin content, and, accordingly, the introduction of these higher yielding yellow strains is meeting with a keen demand for the seed. These precious supplies of the improved yellow types are therefore of wide interest. They are the result of a belief by Station workers that the popular demand for yellow corn would increase rather than decrease and that growers of yellow corn are entitled to yields equal to those obtained by growers of white corn.

The methods used in breeding these yellow strains have been the same as those used in producing the new sweet corn varieties, Honey June, Surecopper Sugar, whose popularity is extending throughout the south. Briefly, the method is known as "back-crossing." For example, in converting Surecopper to yellow, Dr. Mangelsdorf first crossed pure Surecopper to a yellow seeded variety. The next year the hybrid was crossed back to Surecopper. This process was continued for four years, only the yellow seeds being planted each year. By this time the variety had become almost identical to Surecopper in its general characteristics and it was only necessary to fix the color so it would breed true for yellow. This was done

by self-pollination. The selected plants were bagged and pollinated with the pollen from the tassels of the same plants. These processes served to fix type and color so that the resulting yellow strains possessed the qualities that cause them to breed true when there is no crossing from other varieties growing in the locality. In modern corn breeding, every pollination is controlled and recorded as precisely as any mating in a herd of pedigreed livestock. The corn breeder no longer depends on nature's random matings in which the pollen from thousands of plants, good and bad, is mixed by the wind and spread over the entire field. There is no magic in these processes. They are quite simple even though they are strictly scientific, but results like these serve to show how science is serving the needs of agriculture.

Variety Test of Legumes

By E. B. REYNOLDS of Texas Exp. Sta.

Work was started in 1930 to determine the value of various legumes for seed and forage production and for soil improvement in different regions of Texas. Twenty or more winter-growing and summer-growing legumes including various clovers, vetches, peas, and beans, are grown in these trials. The work is conducted at the substations but a brief summary of the results obtained at the several stations is presented here in order to give a more comprehensive account of the work as a whole.

Soybeans have made higher yields of both seed and forage in eastern Texas than in other parts of the state. The largest yields of forage have been obtained at Beaumont, where the Ootootan variety made an average yield of 3.24 tons of air-dry forage for the five years 1931-35. This variety also gave the largest average yield, 2.34 tons at the Angleton Station. The best yields of seed have been obtained at Tyler and Beaumont. The Laredo was the leading variety at Tyler, with an average yield of 14.5 bushels per acre for the two years 1933-34. At Beaumont the Ootootan variety made the best average yield, 14.6 bushels, in 1931 and 1932. Frequently, however, the conditions at Beaumont and Angleton are not favorable for the filling of the pods, which results in a failure or low yields of seed.

Cowpeas as a group have produced on the average slightly larger yields of forage and considerably larger yields of seed than soybeans in most parts of the state. Brabham is the highest-yielding variety of forage at most of the stations. As regards yields of both seed and forage it is the best variety of cowpeas for most parts of Texas.

Velvet beans have made larger yields of air-dry forage than any legume in the tests at Nacogdoches and Tyler. Velvet beans made an average yield of 3.31 tons of forage per acre at Tyler in 1933 and 1934 and 1.56 tons at Nacogdoches for the four years 1931-34.

Among the winter-growing legumes, hairy vetch and Austrian winter peas appear to be most winter-hardy. They are the best winter legumes for soil improvement in the eastern and northeastern parts of the state. Hubam clover has been the most promising winter legume in the tests at College Station, Beeville, and Temple. Bur clover, hop clover, and white clover are good constituents of winter pastures in the more humid part of the state.

Several other legumes, including mung beans and guar, have been included in the variety test. In general, however, they have not produced as good yields of either seed or forage as cowpeas or soybeans.

Washington, D. C.—During the five months ending Nov. 30, wheat ground by an average of 1,087 reporting mills totaled 204,401,405 bus., producing 44,409,723 bbls. flour and 3,691,377,738 lbs. offal. This compares with grinding of 196,663,051 bus. of wheat by an average of 1,099 mills, producing 42,694,717 bbls. flour, and 3,517,330,227 lbs. offal during the same period in 1935.—Buro of the Census.

BE PREPARED! HESS DIRECT HEAT DRIERS

ENABLE YOU TO HANDLE

NEW GRAIN WITHOUT LOSS

DON'T DELAY

WRITE FOR FREE CATALOG.

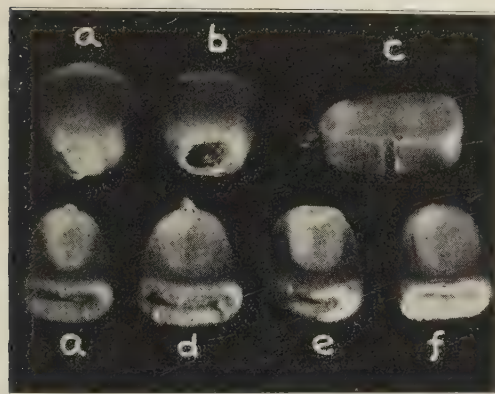
HESS WARMING AND VENTILATING CO.
1211 SO. WESTERN AVE., CHICAGO

Injured Seed Reduces Yield

Kernels of seed corn that have had their seed coats injured in handling produce poor seedlings, poor stands and poor yields of corn, compared with the stands and yields of corn from good, uninjured seed. Early experiments by the University of Illinois proved this so conclusively that a vast amount of breeding work was done to develop smooth strains of corn, less susceptible to kernel injury than the rough dented corns commonly raised.

Corn ears that feel rough to the hand have kernel coats that are puckered into sharp ridges at the crown. These sharp ridges frequently break off in handling, especially at the crown. The damage is done most frequently in the sheller or in the mechanical corn planter where the kernels come into direct, and often violent contact with metal.

To test the effect of injured seed coats on the resulting seedling the Illinois experiment station used 32 ears of the station strain of Reid's yellow dent. A different form of injury was artificially caused on a portion of the kernels from each ear, while another portion of the kernels from each ear were left unin-



Types of Seed-Coat Injury Produced Artificially to Determine Effect Upon Resulting Corn Crop. (a) Sound Coats, (b) Tip Caps Broken Off, (c) Injury at Side Exposes Only Horny Endosperm, (d) Puncture of the Crown, (e) Partial Seed-Coat Removal From the Crown, (f) Complete Seed-Coat Removal From the Crown.

jured and used as a check in the germinating and growing experiment.

Breaking off the tip caps of the kernels caused a small, but not statistically significant reduction in the yield. Breaking the kernel coat at the side, where only horny endosperm was exposed, similarly reduced yields slightly, but not significantly. Puncturing the crown of the kernels, however, reduced the yield 16 per cent. Partial removal of the seed coat from the crowns reduced the yield 17 per cent. Complete removal of the seed coat from the crowns of the kernels reduced the resulting yields by 18.2 per cent.

The smooth types of seed corn, having no sharp edges, are much less subject to damage in shelling or handling than the rough dented types.

Top winners in the yellow dent corn classes at the International Hay & Grain Show at Chicago have all shown smooth varieties of the grain in the last several years. Wm. H. Curry, Tipton, Ind., the 1936 "Corn King," says that "the smooth varieties make better feed, and the small cobs and long kernels tend to make the corn shell out to the entire satisfaction of the grain dealers."

Washington, D. C.—Milburn Lincoln Wilson has been elevated from assistant sec'y of agriculture to under sec'y, and William Winton Alexander has been made resettlement administrator to fill the official positions left vacant when brain trustor Rexford Guy Tugwell resigned to become associated with a molasses company.

Indiana Seedsmen Re-elect Officers

Old officers were re-elected at a brief meeting of the Indiana Seed Dealers Ass'n following the afternoon program of the Indiana Grain Dealers Ass'n at Indianapolis, Jan. 19. They are A. D. Warren, pres.; Noble R. Shaw, vice-pres.; J. H. Haymond, sec'y; E. M. Burge, treas. Directors: Court L. Hunter, L. J. Graf (Evansville), J. H. Haymond and Claude C. Barnes.

Activities of the organization were briefly reviewed and a legislative com'te consisting of E. M. Burge, Court L. Hunter, Noble Shaw, Guy Davis and Wm. Steeb, was appointed.

Present at the meeting were Ed Burge, Harold Burge, Dan Bash and A. D. Warren, Indianapolis; C. C. Barnes, Winchester; Court L. Hunter, Greensburg; J. H. Haymond, Muncie; Guy Davis, Lebanon; Frank Ross, Noblesville; S. J. Brown, Valparaiso; Noble Shaw, T. H. Beeson, T. C. Crabbs, Crawfordsville; Wm. Steeb, Crown Point; Chris Bahler, Galveston; and Dal S. Foster, Carmel.



At left, a Rough Type; at right, a Smooth Ear.

Better Wheat

Dr. John H. Parker, plant breeder, Kansas Agricultural Station, speaking at the annual dinner of the Northwest Crop Improvement Ass'n, Minneapolis, Dec. 30, said:

"It is possible that we should begin now to consider the need for some form of control of crop varieties. A variety of wheat having a serious defect, such as lack of winter hardiness, late maturity, weak straw, low yielding capacity, or inferior quality, may cause serious loss to the farmer and the miller, and may injure the reputation of wheat and flour from a local area, a state or even a region as large as the spring wheat area of the Northwest or the winter wheat region of the Southwest.

"Canada, Argentina and Soviet Russia have recognized the importance of controlling the varieties of wheat grown on farms. Few in America want any such rigid control of agricultural practice as is being attempted in Russia.

"The Canadians carry on an effective educational program as to the value of pure seed of good varieties. This educational program supports the Canadian Seeds Act, which provides that no person shall sell seed of a new variety for planting in Canada unless such person has first obtained a license to do so from the minister of agriculture. In the case of cereal grains the minister may refuse to issue a license if the variety is found to possess such inferior qualities or characteristics as to impair its value for commerce.

"Dr. L. H. Newman, Dominion cerealist, states: 'Before approving a new variety we make sure that the variety is actually new and not an already existing variety bearing a new name, and also that the variety possesses some distinctive merit which makes its introduction of at least some value to some district or districts.'

"Major H. G. L. Strange, of the Searle Grain Co., Winnipeg, directs the plan of crop testing in which his company and other grain firms are co-operating with the Dominion cerealist, each year, in growing some 5,000 samples of wheat obtained from farmers as they deliver their wheat to country elevators. These samples are planted in drill rows one rod long, on a tract of land near the local elevator. Each summer an experienced cerealist inspects these seed plots with the growers and the elevator agent. To those farmers who are growing wheat of poor, mixed, or 'mongrel' strains, seed of the best adapted varieties is made readily available at a fair price. The grain companies further encourage farmers to grow high grade wheat by paying a premium for a superior crop and discounting the price on inferior grain."

Trade authorities report between 100 and 125 trucks loaded with corn, moving daily over a single highway between northern Illinois and Iowa.

RANDOLPH GRAIN DRIERS

ASK THE MAN WHO HAS ONE

THAT'S ALL

WRITE FOR CATALOGUE

O. W. RANDOLPH COMPANY

3917-21 IMLAY ST., TOLEDO, O., U. S. A.

Feedstuffs

New York, N. Y.—December receipts of millfeed were 60 tons compared with 104 tons in December, 1935.

Cattle on feed in the corn belt are estimated by the Department of Agriculture at 23 per cent fewer than in January, 1936.

Bewley Mills, Fort Worth, Tex., has filed trade mark No. 375,420, "Anchor," a drawing of an anchor, and, in outline lettering below, "Chunkets," for stock feeds.

St. Louis, Mo.—A Feed Trades Relations Council has been created by the Grain & Feed Dealers National Ass'n, with E. C. Dreyer, St. Louis, chairman.

Cedar Rapids, Ia.—A meeting Jan. 9, sponsored by Wilson & Co., attracted 125 feed dealers of east central Iowa, who listened to Dr. W. A. Billings, of Minnesota, widely known turkey production specialist.

Soybean expeller plants at St. Louis, Mo., and Circleville, O., were closed Jan. 22 by the Ralston Purina Co., announcing that at the current high price of beans it could not dispose of the oil and meal at a profit.

Spokane, Wash.—A meeting of 30 feed dealers from Idaho and northeastern Oregon was recently told by H. S. Berry, feed department, Sperry Flour Co.: "Balanced rations of tested feeds for live stock are winning in weight for the farmer and feeder, and modern merchandising methods are winning for the mills."—F.K.H.

Chopping alfalfa hay into $\frac{1}{4}$ or $\frac{3}{4}$ inch lengths made storage of two to three times the volume of hay possible in the same space occupied by normally cured hay. However, dairy cows did not like the chopped hay as well as long hay, and dropped in milk production slightly. Chopped hay heated more readily than long hay in these Beltsville, Md., experiments.

Comparing the vitamin D content of milk from cows fed high and low protein rations, the high protein ration including alfalfa hay and corn silage, the low protein ration including timothy hay and liberal quantities of corn silage, Krauss, Bethke and Washburn, Ohio experiment station, found milk from the cows on the high protein ration was richest in vitamin D. This they attributed to the higher vitamin D content of the alfalfa fed.

Seattle, Wash.—The Pacific Northwest Feed Ass'n is said to have signed an agreement with the teamsters' union effective Jan. 8 that only drivers and warehousemen who are members of the teamsters' local unions be employed, effective in all but four counties of the state. A maximum 48-hour work week is provided for and the wage scales run from a minimum of sixty cents per hour for drivers in the smallest communities to \$6.50 per day in Seattle, and from \$100 per month to about \$115 for warehousemen. Time and one-half is to be paid for all overtime.

December production of alfalfa meal was 30,040 tons. Production June thru December of about 197,000 tons was 50 per cent larger than the five-year average for the same months. Plants producing meal for use in their own mixed feeds (output not included in commercial production statistics) were also reported to have turned out large quantities of meal. Distillers dried grains output during December of 24,940 tons was the largest of the season, and about 3,400 tons above the large output of November. Shipments during the month of 24,770 tons

were also the largest for the season. Stocks at plants on Jan. 1 totaled 1,320 tons.—U. S. Dept. of Agriculture..

Iron Fed Pigs Thrive Despite Worms

A small daily dose of dilute iron and copper sulphate given to pigs suffering from nutritional anemia and nodular worms resulted in larger and more profitable gains despite the fact that the treated pigs had more worms at the end of the test than the untreated ones. The test was conducted at the National Agricultural Research Center, Beltsville, Md.

Pigs thrive when iron-copper solution is added to their daily ration, this test shows. The tonic improves physical condition until the pigs can withstand the parasite.

The iron-copper solution is prepared by adding one ounce each of ferrous sulphate and copper sulphate to one-half pint of water.

One part of this basic mixture is added to 800 parts of water. In the tests a dose of about one teaspoonful of the diluted tonic was mixed with the daily ration.

L. A. Spindler, zoologist of the bureau who conducted the tests, says nutritional anemia is a common disease among pigs kept indoors. Evidence of the disease is excess fat, inactivity, shortness of breath, occasional diarrhea, and a slow rate of growth. Nodular worms are common parasites.

Four groups of pigs, all suffering from nutritional anemia, and artificially infected with varying numbers of nodular worms, were studied in the experiment. All were fed the same ration. In the untreated groups the gains ranged from 1.6 pounds to 3.4 pounds a week. The treated groups gained from 3 to 4.6 pounds a week.

Use of the words "shredded wheat" by the Kellogg Co. of Canada did not infringe the trade-mark of the Canadian Shredded Wheat Co., the Canadian Court of Appeals recently decided.

BUY

Blue Streak

GRINDERS

Only 1800 RPM Hammer Type

and Blue Streak Corn Cutters

THERE IS NO FINER EQUIPMENT

SEND FOR INFORMATION

PRATER PULVERIZER CO.

1829 South 55th Ave.

CHICAGO, ILLINOIS

Pacific Northwest Legislative Program

At a meeting on Jan. 4, the Pacific Northwest Feed Ass'n's Board of Governors developed a general legislative program, and appointed an Executive Com'te on legislation, to work with the Pres. and Manager during the legislative session. On the Executive Com'te are John Gould, Fred Holm and C. F. Larsen.

TAXATION: The Ass'n will support the following general tax program:

- Retention of business and occupation tax at the rate of $\frac{1}{4}$ of 1%.
- Retention of 2% sales tax, with compulsory pass-on feature, and use of tokens.
- Removal of specific exemptions under the retail sales tax.
- Continuance of classification as wholesale of all commercial sales to farmers of feeds, seeds, fertilizers and agricultural containers.
- Confining of manufacturers' tax, now $\frac{1}{4}$ of 1%, to a basis of gross sales within the state only, thereby exempting manufacture for export from the state.
- Fifty per cent reduction of "service and other business" rate to $\frac{1}{4}$ of 1%, to conform to balance of business tax, and avoid necessity for bookkeeping segregation.
- Opposition to exemption of any and all special groups from business tax or other taxes paid by Ass'n members.

COMMISSION MERCHANTS LAW: A proposed new Act has received Board approval. It will, if enacted, eliminate the \$1,000 bond on dealers, but increase the license fee to \$25 (a net saving of \$5). It also gives the Director of Agriculture power to revoke a license for any of a named series of offenses.

FEED AND FERTILIZER LAW REVISION: The Board approved the proposed general Code on feed, fertilizer and livestock remedies, determining to exempt molasses mixtures from the fiber limit, and to remove prohibitions of specific materials on the ground that the 10% fiber limit constitutes sufficient protection.

FEED AND FERTILIZER FUND: The Ass'n will seek placing of brand taxes on feed in a special fund, expended only for enforcement of the feed and fertilizer law.

SEED LAW: The Ass'n seeks to maintain the present limitation of eight ounces (8 oz.) as the maximum for seed packets which may be sold without a seed license.

New!

20th Edition

Feeds & Feeding

by
F. B. Morrison

This edition has been entirely rewritten and revised to contain the latest information on live stock feeding and nutrition. Entirely new compilations of recent analyses of American feeds are presented in the Appendix Tables. Extensive data are presented concerning the mineral and vitamin content of important feeds.

The only authoritative book on the subject of animal feeds and feeding. The result of over 38 years of exhaustive work in experimentation.

Its three parts, each divided into numerous chapters, cover "Fundamentals of American Nutrition," "Feeding Stuff," "Feeding Farm Animals." This new edition contains approximately 40% more material than the 19th edition, and contains 1,156 pages, including 95 informative illustrations. This book will enable any grinder and mixer of feeds more intelligently to suggest and compound worth while rations. Beautifully bound in black keretol, durable covers; weight 5 pounds, price \$5.00 plus postage. Send for your copy now.

Grain & Feed Journals
Consolidated

332 S. La Salle St.

Chicago, Ill.

Feeding Minerals to Livestock

By E. E. CLORE, D.V.M.

A properly balanced feed maintains normal chemical balance in the animal system and helps to keep the animals in a healthy condition that resists diseases and parasites.

Some of our more pronounced mineral deficiency diseases are responsible for early discoveries of important mineral elements. Heavy cropping of farm lands without proper fertilization caused marked shortages of calcium and phosphorus and other minerals. Adding limestone or fertilizer in almost any proportions gave such wonderful results that investigators were prompted to dig deeper into the subject of minerals.

Like any other kind of feed, minerals must be balanced and at the same time be palatable, according to requirements, or the bird or animal may eat of the feed sparingly, possibly to such an extent as to cause malnutrition and vitality so lowered that disease easily gains a foothold.

Balancing minerals was a difficult job. We didn't know whether the consuming stock should have 50 per cent calcium, 20 per cent iron, and 30 per cent phosphorus or just the reverse. Now we know that a 2:1 calcium-phosphorus ration is desirable. Consideration is now being given to the highly important factor of palatability. When we have palatability as well as correct mineral balance we shall have a highly efficient product for incorporation into prepared balanced rations.

Compounding mineral elements is a specialized, scientific job, properly undertaken only by those familiar with the anatomy of the animal body, and thoroly trained in animal diseases and their relation to nutrition. I have seen limestone, bone meal and salt lie in a self-feeder uneaten while the hogs in the yard were literally starving to death for these elements. Improperly proportioned, or unpalatable, the hogs refused to touch the minerals. Minerals can do livestock no good unless they are consumed.

Unscrupulous salesmen have sometimes led farmers to believe that corn, mineral, and water were an adequate ration for hogs. Responsible salesmen have been taught to recommend animal and vegetable proteins along with corn, mineral and water to produce a properly balanced diet.

Instead of inflating the udders of cows suffering from milk fever we now inject a calcium solution into the jugular vein. In about an hour the cow is on her feet again and perfectly normal. It is apparent that unless calcium is available in the cow's system she will go down at the calving period, and will die unless something is done. The same effect is apparent in cases of nutritional abortion. The cow will give calcium and phosphorus to the fetus as long as possible, but if these minerals are not consumed and the available supply in the cow's system become exhausted the calf may die and be expelled. A balanced mineral, together with adequate grain and protein rations will correct or prevent this trouble.

If a brood sow's ration is only corn the little pigs will be squeaky and practically dead at birth. Adequate minerals and proteins in the brood sow's diet during gestation will make these pigs one-half to one pound larger at birth, which means 10 to 15 days quicker to market.

Minerals produce marvelous results thru their effect on the metabolism of the animal system, whereby proteins, fats, carbohydrates and other food elements are more completely assimilated. Almost any half-way balanced feed will be readily consumed by the livestock and no physical symptoms of mineral deficiencies are likely to appear. But add a properly balanced mineral feed and note how much less feed is required in proportion to the meat, milk or eggs produced. In feeding hogs the farmer's problem is to get 200 lbs. of pork on the market in the shortest possible time

and for the least possible feed expense. Properly balanced minerals added to the tankage, alfalfa, high protein concentrates, corn and other feeds will cause the pigs to gain faster, and consume less farm grains and protein feeds in proportion to 100 lbs. of gain, thus reducing costs.

Until recently the cattle feeding business has been a routine of corn, hay, fodder, silage, if available, and usually cottonseed meal, or any of a small group of like high protein concentrates. Had someone suggested five years ago that meat products be fed to herbivorous animals he would have been classed as "silly." Yet in the last five years experimental stations have found that feeding meat products to cattle in the proper proportions tends to give quick growth and cheap beef. Overlooked in connection with feeding meat products to cattle has been the mineral content of the meat. This mineral content I believe to be largely responsible for the good gains that follow. Adding the proper mineral balance to the diet of cattle, I am convinced, would send the industry forward in great strides.

Dr. Hughes of the Kansas Agricultural College recently gave a fascinating address on the chemical and mineral balance in the human and animal families, pointing out the important roles played by the pituitary, adrenal, thyroid, thymus and other glands. For example, the pituitary gland, which lies in the middle of the head, and controls growth, can be assisted with a laboratory preparation. It is no longer necessary for a man to be five foot six if he desires to be five foot ten. During the growing period doctors can give him a shot in the arm that will continue his growth to the desired height.

Many roosters are culled out of breeding flocks because they do not carry enough male characteristics. Today these deficient birds can be inoculated with a laboratory preparation which will turn them into fine looking cockerels, with fine feathers, strutting walks, good combs and capacity to perform everything of which a rooster is capable.

No ration is complete without a properly balanced, blended and palatable mineral. This is no job for an amateur, for poor mineral preparations can destroy the effective balance of an otherwise good feed. A mineral should be tailor-made for a feed; or a feed should be tailor-made for a mineral.

Mohler Objects to Rice Hulls

J. C. Mohler, Topeka, sec'y of the Kansas State Board of Agriculture, looks upon rice hulls in feed mixtures with disfavor. In a recent statement he said:

"In searching for something with which to tide over the (feed) shortage . . . many farmers will buy prepared feeds in the belief that they will better maintain the growth of beef and the production of dairy animals.

"In the event that feeds are to be bought, caution should be exercised to avoid those containing rice hulls, which are being advertised in the Kansas City markets as sold in 'substantial quantities' to the feed mixers for \$14.30 a ton. Rice hulls are condemned by authorities as being unfit to be fed to farm animals. To quote Henry's Feeds and Feeding: 'Rice hulls are tasteless, tough and woody. They are heavily charged with silica, or sand, and have sharp, flinty edges and needle-like points . . . and furnish only about one-third as much digestible nutrients as wheat straw. They should never, therefore, be fed to farm animals, yet they have been extensively used by unscrupulous dealers for adulterating mixed feeds, and are sometimes ground and sold as 'husk meal' or 'Star bran.' This from one of the highest authorities in the country.

"Rice hulls do not have as much digestible nutrients as corn cobs by nearly 75 per cent, and they have nearly 20 times as much mineral matter, and that mineral matter is sand."

Poultry Feeds and Feeding

Baltimore, Md.—The International Baby Chick Ass'n will hold its 1937 convention here July 19-22, inclusive.

Representations that its imported Swedish peat moss has been approved by the government must be discontinued by the Premier Peat Moss Corporation, by order of the Federal Trade Commission.

Creston, Ia.—The Federal Trade Commission has issued a complaint against Allen Poultry Farm and Hatchery, charging violation of Section 5 of the Federal Trade Commission Act, by alleged misrepresentations in the sale of chicks.

Two groups of White Leghorn chicks were fed for 6 weeks on well balanced rations, one containing soybean meal and the other meat meal in equivalent amounts. The protein content of the rations was 17%. Growth in the groups was similar for 6½ weeks, after which the group on the meat meal did better. It is concluded that soybean meal can be used as a protein supplement in a growing ration, but it should be fortified with a mineral mixture and should be used in larger amounts than meat meal.

Increasing numbers of hens, record heavy production of eggs per hen, and a total production of eggs about a fifth greater than a year ago are shown in the poultry report issued Jan. 23 by the Bureau of Agricultural Economics. Hens were laying about 15 per cent more eggs per hen at the beginning of this month than they were a year ago and about 10 per cent more than the previous high record for that date (1932). The Bureau reports total production of eggs in the country at the beginning of the month as about 20 per cent greater than a year ago.

Seattle, Wash.—The proposed poultry sanitary code appears to have been abandoned in favor of merely including the words "and poultry" in the present law regulating livestock. Dr. Prior, former supervisor, believes even this to be unnecessary, holding that "livestock" already includes poultry; but since there seems to be a demand for the amendment, no one appears to oppose it. The amendment provides no specific regulation, nor is any now contemplated by the department. I am assured that any attempt to use sanitary regulation as an embargo against California baby chicks, or others, would be disapproved by the department.—Floyd Oles, manager Pacific Northwest Feed Ass'n.

Vitamin A Required by Chicks

Little information is available at the present time regarding the quantities of vitamin A required by growing chickens. Lepper and Reid report that one per cent of cod liver oil was satisfactory, but since the strength of the cod liver oil was not given in their study and since vitamin A is destroyed rapidly when mixed with ground feeds, as shown by Fraps and Kemmerer, an estimate of the quantity of vitamin A required is hard to make. Bethke and Record state that approximately 100 micrograms of carotene per 100 grams of basal ration was required to meet the basal requirements of vitamin A for the first 8 weeks of growing chickens.

Sherwood and Fraps have shown that the vitamin A requirements of laying hens are high. They also showed that the vitamin A content of the eggs might vary as much as from 2 to 50 Sherman-Munsell units of vitamin A potency per gram of yolk. The quantity present in the egg was found to depend upon the quantity of vitamin A stored by the hens at the beginning of the laying period and the quantity of vitamin A consumed during the laying period, as well as upon the length of time the hens had been laying. Eggs laid by hens receiving insufficient vitamin A in their feed had a low hatchability. Previous work has shown that eggs may have a good hatchability with only 11 Sherman-Munsell units of vitamin potency per gram of egg yolk.

The work here reported is a study of the effect of the vitamin A content of the feed of the hen, and of the feed of the chick, upon the health and growth of the chick.

These experiments showed that chicks hatched from eggs laid by hens receiving 265 Sherman-Munsell units of vitamin A per day (or 325 units per 100 grams of feed) had low vitality. The mortality of the chicks for the first eight weeks on different vitamin A levels varied from 64.4 per cent for the chicks from the hens receiving 265 units a day (or 325 units per 100 grams of feed) to 38.5 per cent for the chicks from the hens receiving 539 units per day (or 655 units per 100 grams of feed).

The mortality for the chicks from the hens fed the feed low in vitamin A was high regardless of the feed of the chick. Feeding the chick 300 units of vitamin A per 100 grams of feed did not overcome the effect of a deficiency of vitamin A in the feed for the laying hens; but the vitamin A requirements of chicks are higher for those hatched from eggs laid by hens receiving low amounts of vitamin A than for hens fed more liberal amounts.

The experiments indicate that from 125 to 150 units of vitamin A potency, or 96 to 110 micrograms of carotene from alfalfa, or 114 to 136 micrograms of cryptoxanthin and carotene from yellow corn per 100 grams of feed, is sufficient for chicks hatched from eggs rich in vitamin A. Chicks hatched from eggs laid by hens receiving low amounts of vitamin A require

larger amounts, possibly as high as 300 units of vitamin A potency, or 230 micrograms of carotene from alfalfa, or 270 micrograms of carotene from yellow corn per 100 grams of feed.—Bull. 528, Texas Exp. Sta.

Baby Chick Rations

The Michigan Agricultural Exp. Station has recently reported on a study of different baby chick rations.

In 1934, trials of cafeteria (free choice) feeding of protein from various animal and vegetable sources, consisting of six lots of 35 chicks each, were completed. The Spartan starter was used as a basis of comparison and soybean oil meal, cottonseed meal, meat scrap, milk and alfalfa were used as the sources of protein. Cottonseed meal in this test proved to be the most palatable and gave, in combination with other protein sources, nearly as good growth as the Spartan starter.

Two lots of pullets were grown from eight to 24 weeks of age in batteries. One lot received a mash consisting of normal cereal constituent and 8% protein supplement, consisting of soybean oil meal, meat scrap and dried milk. The other lot received 18% protein supplement in addition to the same cereal. Grain consisting of corn and wheat was kept before the birds at all times. The birds showed considerable ability to balance

Cipher Codes

Universal Grain Code: Most complete, up-to-date grain code published. Effects a greater reduction in tolls than any other domestic code. 150 pages, 4½x7 inches. Price, leather, \$3.00; paper, \$1.00.

Robinson Telegraph Cipher Code: Revised with all supplements, for domestic grain business. Leather, \$2.50; cloth, \$2.00.

Dowling's Grain Code for Grain Milling and Produce Trades, 6th edition: Used extensively in Western Canada. 154 pages, 4¼x6½ inches. Weight 4 ozs. Price \$3.00.

Millers Telegraphic Cipher: (1936) For the flour feed and grain trades. 157 pages, 3¾x6½ inches. Cloth bound. Weight 6 ozs. Price \$2.00.

Gross Telegraphic Cipher: 10th edition revised for provision and grain trades. 148 pages, 4½x5½ inches. Cloth \$4.00.

A. B. C. Improved Fifth Edition with Sup.: Reduces cable tolls 50% thru use of five-letter words, any two of which may be sent as one. In English. Price, \$20.00.

Bentley's Complete Phrase Code: Contains nearly 1,000 million combinations, any two of which can be sent as one word. Thru its use a saving of 50% can be effected in cablegrams. 8½x10½ inches. Leather back and corners. \$10.00.

Peerless Grain Code for international grain and feed trades. 300,000 different offers expressed by one half codeword combining Destination, Time of Shipment, Quantity, Quality and Price. 10,000 complete Phrases relate to Export grain trade. Private Supplement contains 3000 blank code words. Price \$85.00.

Baltimore Export Cable Code: Hinrich's fourth edition, completed especially for export grain trade. 152 pages, 6½x9 inches, bound in leather. Price \$15.00.

Riverside Flour Code, Improved (5 letter revision): Sixth edition. For use in domestic and export trade. Size 6x7 inches, 304 pages. Bound in flexible leather, \$12.50.

All prices are f. o. b. Chicago.

GRAIN & FEED JOURNALS
Consolidated

332 So. La Salle Street CHICAGO, ILL.

KELLY DUPLEX MILL MACHINERY



New 1937 Model
Feed Mixer

With Latest Improve-
ments at a New Low
Price.

Write for details.

Everything
for Mill and Elevator

The Duplex Mill & Mfg. Co.
Springfield, Ohio

Practical Poultry Farming

By L. M. Hurd

This revised and enlarged edition is right up-to-date and contains all important discoveries in poultry raising made in recent years.

The book contains the latest information on feeding, a complete discussion of the new vitamin G, practical information on the two-story poultry house and heating, disinfecting incubators, battery brooding and raising chicks on screened platforms, and the latest discoveries in treating pests and diseases, including Leukemia, and the newest information on disinfecting houses. This edition also describes the new methods of feeding turkeys.

Printed on enamel book paper from large type and well bound in cloth. 480 pages, 33 chapters, and 200 engravings. Weight 2 lbs. Price \$2.50 plus postage.

Grain & Feed Journals

Consolidated

332 S. La Salle St.

Chicago, Ill.

their own intake of crude protein with the other feed by regulating the amount and consuming more or less grain, depending on whether it was a high or low-protein mash. No noticeably earlier maturity, as measured by date of first egg, was obtained with the high-protein mash under this method of management. The range of weight was wider on the high-protein mash. The cost of raising the pullets was approximately the same.

In the spring of 1936, 800 chicks from hens on low-vitamin A basal rations were hatched and started on a vitamin A-free diet to determine whether there was a carry-over to the chick of vitamin A. The data at present are in process of tabulation and no definite statement can yet be made, although there is some indication that there is some carry-over in the chicks.

A substitution of oats for wheat by-products has been attempted during the past year. Fourteen lots of chicks have been grown to eight weeks of age on varying amounts of oats. Indications are that increased amounts of oats can be satisfactorily used after two or three weeks of age.

Corn Gluten for Turkeys

Dr. J. E. Hunter of Pennsylvania State College says that a series of studies showed that soybean oil meal and corn gluten meal, which normally sell for less money than the animal protein concentrates, could be used to replace a portion of the animal protein. A combination of soybean oil meal and corn gluten meal was found to give excellent results when used as 10% of the mash mixture.

"Turkeys fed on mashes containing corn gluten meal showed much better finish as characterized by covering of flesh over the breast than did those birds not receiving corn gluten meal. One of the greatest problems of the turkey grower is to produce a well fleshed carcass at a marketable age.

"When making substitutions careful consideration should be given so that none of the nutritive value of the mash be lost. The animal protein products carry considerable calcium and phosphorus and when vegetable protein replaces animal protein it may be necessary to compensate for the mineral loss by the use of bone meal or other calcium and phosphorus carriers."

Turkey Feed Formulas

The U. S. Dept. of Agriculture recommends the following turkey mashes:

	Al Mash Laying or Breed- ing Diet	Turkey Starting Mash	Turkey Growing Mash
Bran	6	12	12
Shorts	25	12	12
Finely ground oats	20	12	12
Coarsely ground yellow corn	30	12	12
Alfalfa leaf meal	4.5	12	12
Meat scrap	3.5	12	12
Fish meal (70% protein)	2	12	12
Dry skim milk	4	12	12
Ground oyster shell	3.5	12	12
Salt	0.5	12	12
Cod liver oil	1	12	12
	100.0	100	100

"Feed starting mash for the first 6 weeks; feed at 50-50 mixture of starting and growing mashes during the 7th and 8th weeks; feed the

growing mash from 9 to 12 weeks, inclusive; feed the growing mash with scratch grain from 13 weeks to marketing.

"Starting mash may be supplemented with fresh, fine cut, tender green feed once or twice daily whenever poults cannot obtain it from the yard.

"These starting and laying diets are 'complete' and will give good results in cases where birds obtain little or no green feed. The growing diet is 'complete' except for the vitamin D factor which should be provided by giving the birds access to direct sunshine in yards or sunporches.

"Feed no supplements with the laying mash except water and insoluble grit such as gravel. Feed the mash daily, enough for 24 hours. Access to outside yards is desirable."

Battery Brooder Mashes

By C. W. SIEVERT

A chick that has the advantage of outdoor range has many things in its favor. It can supplement a low protein content by finding some bugs. The fresh green grass undoubtedly furnishes it with some of the necessary vitamins, as well as the roughage or fiber it needs. The same source also supplies coloring matter. The natural sunlight supplies vitamin D and possibly other unknown factors. In other words, outdoor range gives the chick a chance to grow and develop even though its mash feed is not entirely complete in itself.

When chicks are raised in battery brooders, and especially when broilers are produced by the battery brooder method, then all requirements must be taken care of. This means not only the right amount and quality of proteins and carbohydrates, but also the correct mineral balance, the vitamins and the proper bulk and fiber.

A chick mash that contains all the nutrients that are necessary may be used in battery brooders. Such feeds contain yellow corn, milk, wheat feeds or ground oats, alfalfa and vitamin D oil as well as the other ingredients commonly used in mash feeds. The mineral balance must be taken care of either through the choice of ingredients having the right mineral content or by means of small mineral additions when necessary.

Most of the experimental work in connection with battery feeding has taken place within the last few years. Formulas more than a few years old are practically useless, since they are usually not complete in every detail. A good battery brooder mash is also a good chick starter when used for chicks in older types of brooders.

An example of a suitable chick feed recommended for battery feeding is the following, from Illinois Circular 329:

40 lbs. ground yellow corn
10 lbs. wheat bran
15 lbs. flour middlings
8 lbs. finely ground oats
5 lbs. alfalfa meal
10 lbs. meat scrap
10 lbs. dry skim milk
1 lb. salt
1 lb. cod liver oil or sardine oil

Washington, D. C.—Government purchases are not subject to the Robinson-Patman anti-price discrimination law, according to a reported ruling of Attorney General Homer Cummings. This ruling has no legal effect in governing the seller. It is a guide for government purchasing officers.



Corn Gluten Feed, Corn Oil Cake Meal,
Brewers' Dried Grains Malt Sprouts
ANHEUSER-BUSCH ST. LOUIS

Vitamin G Requirement of Chickens

Studies by Hunt, Record and Bethke at the Ohio Experiment Station show that the rate of growth of chicks varies with the amount of vitamin G consumed and that a unit of vitamin G in the feed, in which dried skim milk is incorporated, is just as effective in producing growth as a unit from a feed in which alfalfa leaf meal and dried skim milk combined are the supplements. This is particularly true up to the fourteenth week, after which the weight records and the vitamin G consumption are not so closely related.

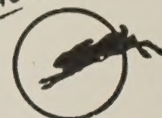
Those hens having the highest vitamin G consumption during the entire period produced the largest number of eggs per hen. As shown, those lots receiving 5.0 and 7.5 per cent of dried skim milk, respectively, had a fair egg production record for a few months but fell off to a very low record with many hens dying in the meantime. The data show that the highest producing hens did not consume enough

CHECK
YOUR
FORMULAS
with
Laboratory
Analyses

Protein, Fat, and Fibre
—Feed or Grain—
Analyzed at
Reasonable Rates
Runyon Testing Laboratories
1186 Board of Trade Chicago, Illinois
"Runyon Analyses Help Sell Feeds"

Triple XXX Alfalfa Meal

Use more of it—it's healthful



THE DENVER ALFALFA
MILLING & PRODUCTS CO.

Merchants Exchange
ST. LOUIS

LAMAR, COLO.

Poultry Production

by Lippincott and Card
(5th Edition—Revised)

Every elevator that grinds and mixes poultry feeds needs this new, quick-reference volume, devoted to practical management of poultry enterprises. Prepared by noted authorities, it includes 238 illustrations. Considers culling, prevention and cure of diseases, incubation, brooding, housing, ventilation, etc., and gives 63 pages to selection and compounding of feeds, to feeding methods and the nutrient requirements of poultry.

Bound in cloth, 723 pages, fully cross indexed. Weight 4 lbs. Price, \$4.00, plus postage.

Grain & Feed Journals

Consolidated

332 S. La Salle St.

Chicago, Ill.

vitamin G or feed to maintain their weight; whereas hens producing a medium number of eggs were able to maintain their weight on a lower consumption of vitamin G or feed. This is only true of those lots receiving the alfalfa leaf meal and dried skimmilk combined as supplements.

In those lots receiving both alfalfa meal and dried skimmilk as sources of vitamin G, the hatchability of the eggs varied directly with the units transferred from the feed to the eggs. Just why this is not true with dried skimmilk alone requires further study. However, the results seem to point to the fact that alfalfa leaf meal or a combination of alfalfa leaf meal and dried skimmilk contains some factor or factors that dried skimmilk alone does not contain and which are necessary to maintain production and give good hatchability in the eggs so produced. This also confirms unpublished work of this Station, which shows that the rat assay method of measuring the vitamin G content of a ration supplemented with casein and skimmilk is not a true measure of the factor or factors affecting hatchability.

The greatest average number of eggs per bird, 101.51, was produced by the hens receiving in their ration 5 per cent alfalfa leaf meal plus 5 per cent dried skimmilk. Those receiving 5 per cent alfalfa leaf meal produced an average of 37.88 eggs per bird, and those receiving 5 per cent skimmilk produced an average of 60.78.

Feed Costs of New York Dairymen

Pursuing economic studies of dairy farming in New York state, P. H. Stephens found the greatest differences in rates of feeding occurred in the grade herds. A large number of grade herds in which only 22% of the cows freshened in the fall months were fed an average of 1318 lbs. of concentrates per cow and produced 5145 pounds of milk per cow. These herds represented the least intensive system of dairying of any of the groups. The herds were the smallest in size and the cows had the lowest value per head.

The group of farms representing the highest degree of intensity of operation were also found among the grade herds. An average of more than a ton and a half of concentrates was fed per cow on these farms; and 72% of the cows freshened during the months September to December, inclusive.

Considerably fewer variations in rates of feeding were found among the purebred herds than among the grades. The rates of feeding concentrates averaged 16% higher per cow in the purebred herds. In all of the purebred herds producing 6000 or more pounds of milk per cow, more than a ton of concentrates was fed per cow.

Total feed costs increased with increases in the production of milk per cow, though not at a proportionate rate. Feed costs per cow varied from \$67.27 in the herds of low-producing grade cows, where 67% of the cows freshened in the fall months, to \$117.80 in the purebred herds, which had the highest production of milk per cow, and with less than 50% of the cows freshening in the fall.

In the purebred herds where similar amounts of milk per cow were produced, similar feed costs occurred in both the fall- and spring-freshening groups. In the grade herds, considerably higher feed costs occurred, as a rule, where more of the cows freshened in the fall months. For the purebred herds there was a difference of only \$1.69 in total feed costs between the groups of fall-freshening and spring-freshening cows.

Grain dealers with suitably located and equipped hammer mills have a chance at extra grinding profits by grinding roughages. A molasses mixer should help the grinding business.

Feeding Pigs

To the question "What should be fed to fatten pigs weighing 70 pounds when barley and oats are available but no corn or skim milk," H. G. Zavoral of University Farm, St. Paul, Minn., replies:

"To a 100-pound mixture of two-thirds ground barley and one-third ground oats, add 10 pounds of tankage. This mixture can be self, or hand fed either dry or in a thick slop. Give the pigs plenty of water with the chill taken off, and if you have alfalfa or sweet clover hay, feed this in a rack. A-mineral mixture of 40 parts special bone meal, 40 parts high calcium limestone, and 20 parts salt should be kept before the pigs at all times, or 2 pounds of the mixture can be added to each 100 pounds of feed."

Feed Control in Texas

Computed from the sale of feed inspection tags there were 1,298,743 tons of feed sold in Texas during the year ended Aug. 31, 1935, or an increase of 63,571 tons over that sold during the previous year.

During the fiscal year the inspectors secured 2,925 official samples of feed, which were subjected to chemical analysis and microscopical examination. In addition to these, there were analyzed a few registration and special samples, making a total of 3,080 samples analyzed during this period. Eleven samples of registered brands of vitamin D carriers were assayed for antirachitic potency.

During the year covered by this report dealers have been advised to remove from sale 666 shipments of feed, manufactured by 353 different firms, totaling 1,617 tons. These shipments were removed from sale because they did not meet the requirements of the law.

During the year five complaints were filed with county attorneys against manufacturers violating certain provisions of the Texas feed law. Two of these cases were settled by payments of fines and docket costs; two cases are still pending, and one has been placed in abeyance pending future compliance with the law. 686 minor complaints were adjusted thru correspondence from the office together with the assistance of the inspectors. These complaints consisted of untaged shipments of feed, improperly labeled shipments, incorrectly printed tags attached to packages of feed, short-weights, and minor irregularities.

Ten firms were cited for hearings to be held in the office for the purpose of presenting evidence to show cause why they should not be prosecuted for violating the law. Six of these firms sent representatives to these hearings and four answered the citations by letters.

Fishers Seek Investigation

The Pacific Coast pilchard fishing industry is sponsoring an investigatory bill before the legislators of Washington, Oregon, and California, which seeks federal investigation and control of fishing. An international treaty with Canada for joint and equitable supervision of fishing in international waters is also sought.

The bill follows claims of salmon trollers and scattered sportsmen that pilchard fishing is destroying the salmon; while the pilchard fishers present evidence to the contrary.

An exhaustive study of the entire Pacific Coast pilchard industry, which supplies sardine meal and oil to the dairy and poultry producers, is asked.

Feed Prices

The following table shows the closing bid price each week for May futures of standard bran and gray shorts, spot cottonseed meal, soybean oil meal and No. 1 fine ground alfalfa meal, in dollars per ton and No. 2 yellow corn and No. 2 yellow soybeans in cents per bushel:

	Minneapolis Spot		Kansas City	
	Bran	Midds.	Bran	Shorts
Dec. 12.....	33.00	34.00	25.65	32.15
Dec. 19.....	32.50	33.00	26.25	32.75
Dec. 26.....	32.00	32.50	25.85	32.80
Dec. 31.....	31.75	32.00	26.35	32.75
Jan. 9.....	34.00	34.00	27.55	33.50
Jan. 16.....	35.00	35.00	26.25	33.60
Jan. 23.....	34.50	34.50	25.25	32.60
	St. Louis		Chicago Soy-	
	Bran	Shorts	Beans	Meal
Dec. 12.....	27.85	34.00	144	41.40
Dec. 19.....	28.25	34.00	157	42.40
Dec. 26.....	28.00	34.00	152	42.00
Dec. 31.....	28.35	34.35	155	42.90
Jan. 9.....	29.25	35.10	161½	42.90
Jan. 16.....	28.50	34.50	161	42.40
Jan. 23.....	27.25	33.50	159½	42.40
	Cottonseed Meal		Kansas City	
	Ft. Worth	Memphis	Alfalfa	Chicago Corn
Dec. 12.....	37.00	34.50	24.00	112
Dec. 19.....	38.00	34.50	24.00	111
Dec. 26.....	38.00	34.15	24.00	110½
Dec. 31.....	38.00	35.00	24.00	112
Jan. 9.....	38.00	35.00	24.00	113½
Jan. 16.....	38.00	35.25	24.50	113½
Jan. 23.....	38.00	35.00	24.50	112



SIDNEY KWIK-MIX FEED MIXER

A Perfect Batch In Every Mix

HEAVY CONSTRUCTION
QUIET OPERATION
FAST MIXING

Write for Details

ALSO
TRUCK DUMPS — FEED GRINDERS
MANLIFTS
CORN SHELLERS—CRUSHERS—CLEANERS

The Sidney Grain Machinery Co.
Sidney, Ohio

Feeding Questions Answered

By R. O. KLEPINGER

Dog and Calf Rations

Mr. R. O. Klepinger: We will appreciate it if you will send us formulas for a dry dog ration and a dry calf feed.—J. S. Lindsey, Ervine & Bishop, Houston, Tex.

Ans.: A good Dog Feed Ration may be made up from:

- 20 lbs. dehydrated meat, or fish meal
- 20 lbs. soybean meal
- 30 lbs. corn meal
- 10 lbs. middlings or shorts
- 10 lbs. bran
- 5 lbs. dried milk
- 5 lbs. oatmeal
- 1 pint cod liver oil

If dehydrated meat meal is used, add 2 lbs. bone meal, if fish meal is used, no bone is required.

For a suitable Calf Meal try:

- 100 lbs. dried skim milk
- 450 lbs. fine ground corn meal
- 300 lbs. middlings or shorts
- 100 lbs. soybean meal
- 50 lbs. fine ground bran
- 50 lbs. alfalfa leaf meal
- 50 lbs. linseed meal
- 20 lbs. limestone
- 10 pints cod liver oil
- 1 ounce powdered potassium iodide mixed well with the limestone before mixing in the balance of the ration.

Dog Foods

A growing list of trade marks for dog foods impressively directs attention to the growing use of prepared foods for the pets of city dwellers. Once fed scraps from the family table, Rover has been elevated to the eating of balanced rations.

Dogs in the confinement of city apartments have unquestionably demonstrated to their owners that they can live more happily on a prepared, balanced ration than they can on table scraps. Less distemper, and fewer of the myriad aches and discomforts that ruin the disposition of dogs in confinement is the result.

The number of names of packing companies,

canning companies, and others putting out foods for human consumption, that have applied for dog food trade marks casts a suspicion that Rover has really been elevated only from table scraps to scraps from the food industries. Nevertheless, the majority of these manufacturers must properly balance the ration, else dog food sales, and the dog food business would not have grown until it merited a separate ass'n of its own.

A good poultry breeding ration varies little from a good laying ration in protein, carbohydrates and fats. But a good breeding ration is stepped up in its vitamin content, and is especially high in those vitamins affecting reproduction. Poultry need plentiful qualities of all vitamins except C.

Iowa Dealers Create Feed Credit

The Independent Feed Dealers Finance Corp. was created by the Iowa Independent Feed Dealers Ass'n at a meeting of 60 members in Des Moines, Jan. 12, to extend credit to farmers seeking feed loans.

Capital, announces Pres. Ralph Sprague, Oelwein, will be raised thru loans and sale of a stock issue to ass'n members. The security he can offer will govern the amount of credit extended to a farmer.

A board to govern the new finance corporation will be selected at later meetings of the stockholders, and this board will hire administrative officers.

Truck Loads to Bushels 6,600—17,590

Direct Reduction Grain Tables

Weight in Pounds	Bushels	Weight in Pounds	Bushels	Weight in Pounds	Bushels
48	1.0000	56	1.1667	60	1.2500
56	1.1667	60	1.2500	64	1.3333
60	1.2500	64	1.3333	68	1.4167
64	1.3333	68	1.4167	72	1.5000
68	1.4167	72	1.5000	76	1.5833
72	1.5000	76	1.5833	80	1.6667
76	1.5833	80	1.6667	84	1.7500
80	1.6667	84	1.7500	88	1.8333
84	1.7500	88	1.8333	92	1.9167
88	1.8333	92	1.9167	96	2.0000
92	1.9167	96	2.0000	100	2.0833
96	2.0000	100	2.0833	104	2.1667
100	2.0833	104	2.1667	108	2.2500
104	2.1667	108	2.2500	112	2.3333
108	2.2500	112	2.3333	116	2.4167
112	2.3333	116	2.4167	120	2.5000
116	2.4167	120	2.5000	124	2.5833
120	2.5000	124	2.5833	128	2.6667
124	2.5833	128	2.6667	132	2.7500
128	2.6667	132	2.7500	136	2.8333
132	2.7500	136	2.8333	140	2.9167
136	2.8333	140	2.9167	144	3.0000
140	2.9167	144	3.0000	148	3.0833
144	3.0000	148	3.0833	152	3.1667
148	3.0833	152	3.1667	156	3.2500
152	3.1667	156	3.2500	160	3.3333
156	3.2500	160	3.3333	164	3.4167
160	3.3333	164	3.4167	168	3.5000
164	3.4167	168	3.5000	172	3.5833
168	3.5000	172	3.5833	176	3.6667
172	3.5833	176	3.6667	180	3.7500
176	3.6667	180	3.7500	184	3.8333
180	3.7500	184	3.8333	188	3.9167
184	3.8333	188	3.9167	192	4.0000
188	3.9167	192	4.0000	196	4.0833
192	4.0000	196	4.0833	200	4.1667
196	4.0833	200	4.1667	204	4.2500
200	4.1667	204	4.2500	208	4.3333
204	4.2500	208	4.3333	212	4.4167
208	4.3333	212	4.4167	216	4.5000
212	4.4167	216	4.5000	220	4.5833
216	4.5000	220	4.5833	224	4.6667
220	4.5833	224	4.6667	228	4.7500
224	4.6667	228	4.7500	232	4.8333
228	4.7500	232	4.8333	236	4.9167
232	4.8333	236	4.9167	240	5.0000
236	4.9167	240	5.0000	244	5.0833
240	5.0000	244	5.0833	248	5.1667
244	5.0833	248	5.1667	252	5.2500
248	5.1667	252	5.2500	256	5.3333
252	5.2500	256	5.3333	260	5.4167
256	5.3333	260	5.4167	264	5.5000
260	5.4167	264	5.5000	268	5.5833
264	5.5000	268	5.5833	272	5.6667
268	5.5833	272	5.6667	276	5.7500
272	5.6667	276	5.7500	280	5.8333
276	5.7500	280	5.8333	284	5.9167
280	5.8333	284	5.9167	288	6.0000
284	5.9167	288	6.0000	292	6.0833
288	6.0000	292	6.0833	296	6.1667
292	6.0833	296	6.1667	300	6.2500
296	6.1667	300	6.2500	304	6.3333
300	6.2500	304	6.3333	308	6.4167
304	6.3333	308	6.4167	312	6.5000
308	6.4167	312	6.5000	316	6.5833
312	6.5000	316	6.5833	320	6.6667
316	6.5833	320	6.6667	324	6.7500
320	6.6667	324	6.7500	328	6.8333
324	6.7500	328	6.8333	332	6.9167
328	6.8333	332	6.9167	336	7.0000
332	6.9167	336	7.0000	340	7.0833
336	7.0000	340	7.0833	344	7.1667
340	7.0833	344	7.1667	348	7.2500
344	7.1667	348	7.2500	352	7.3333
348	7.2500	352	7.3333	356	7.4167
352	7.3333	356	7.4167	360	7.5000
356	7.4167	360	7.5000	364	7.5833
360	7.5000	364	7.5833	368	7.6667
364	7.5833	368	7.6667	372	7.7500
368	7.6667	372	7.7500	376	7.8333
372	7.7500	376	7.8333	380	7.9167
376	7.8333	380	7.9167	384	8.0000
380	7.9167	384	8.0000	388	8.0833
384	8.0000	388	8.0833	392	8.1667
388	8.0833	392	8.1667	396	8.2500
392	8.1667	396	8.2500	400	8.3333
396	8.2500	400	8.3333	404	8.4167
400	8.3333	404	8.4167	408	8.5000
404	8.4167	408	8.5000	412	8.5833
408	8.5000	412	8.5833	416	8.6667
412	8.5833	416	8.6667	420	8.7500
416	8.6667	420	8.7500	424	8.8333
420	8.7500	424	8.8333	428	8.9167
424	8.8333	428	8.9167	432	9.0000
428	8.9167	432	9.0000	436	9.0833
432	9.0000	436	9.0833	440	9.1667
436	9.0833	440	9.1667	444	9.2500
440	9.1667	444	9.2500	448	9.3333
444	9.2500	448	9.3333	452	9.4167
448	9.3333	452	9.4167	456	9.5000
452	9.4167	456	9.5000	460	9.5833
456	9.5000	460	9.5833	464	9.6667
460	9.5833	464	9.6667	468	9.7500
464	9.6667	468	9.7500	472	9.8333
468	9.7500	472	9.8333	476	9.9167
472	9.8333	476	9.9167	480	10.0000
476	9.9167	480	10.0000	484	10.0833
480	10.0000	484	10.0833	488	10.1667
484	10.0833	488	10.1667	492	10.2500
488	10.1667	492	10.2500	496	10.3333
492	10.2500	496	10.3333	500	10.4167
496	10.3333	500	10.4167	504	10.5000
500	10.4167	504	10.5000	508	10.5833
504	10.5000	508	10.5833	512	10.6667
508	10.5833	512	10.6667	516	10.7500
512	10.6667	516	10.7500	520	10.8333
516	10.7500	520	10.8333	524	10.9167
520	10.8333	524	10.9167	528	11.0000
524	10.9167	528	11.0000	532	11.0833
528	11.0000	532	11.0833	536	11.1667
532	11.0833	536	11.1667	540	11.2500
536	11.1667	540	11.2500	544	11.3333
540	11.2500	544	11.3333	548	11.4167
544	11.3333	548	11.4167	552	11.5000
548	11.4167	552	11.5000	556	11.5833
552	11.5000	556	11.5833	560	11.6667
556	11.5833	560	11.6667	564	11.7500
560	11.6667	564	11.7500	568	11.8333
564	11.7500	568	11.8333	572	11.9167
568	11.8333	572	11.9167	576	12.0000
572	11.9167	576	12.0000	580	12.0833
576	12.0000	580	12.0833	584	12.1667
580	12.0833	584	12.1667	588	12.2500
584	12.1667	588	12.2500	592	12.3333
588	12.2500	592	12.3333	596	12.4167
592	12.3333	596	12.4167	600	12.5000
596	12.4167	600	12.5000	604	12.5833
600	12.5000	604	12.5833	608	12.6667
604	12.5833	608	12.6667	612	12.7500
608	12.6667	612	12.7500	616	12.8333
612	12.7500	616	12.8333	620	12.9167
616	12.8333	620	12.9167	624	13.0000
620	12.9167	624	13.0000	628	13.0833
624	13.0000	628	13.0833	632	13.1667
628	13.0833	632	13.1667	636	13.2500
632	13.1667	636	13.2500	640	13.3333
636	13.2500	640	13.3333	644	13.4167
640	13.3333	644	13.4167	648	13.5000
644	13.4167	648	13.5000	652	13.5833
648	13.5000	652	13.5833	656	13.6667
652	13.5833	656	13.6667	660	

Are YOUR SCALES

As truck load after truck load of grain comes rolling into your elevator to be weighed, you want to know that your scales are an asset: that you can depend upon them to

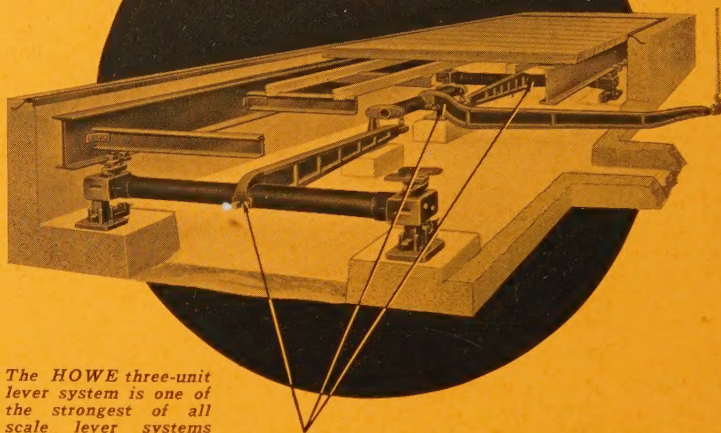
Weigh accurately the heaviest trucks and trailers . . . Require little, if any, upkeep or service charges . . . Satisfy you and your customers.

That is why so many elevator owners stick to HOWE Scales, year after year, and specify HOWE when they need new scales.

In 80 years of weighing, first wagons then motor trucks, HOWE Scales have built a reputation for prolonged accuracy and minimum upkeep expense. Why? Because the HOWE design is RIGHT—a simple, sturdy three-unit lever system and Ball-Bearing-protected knife edges.

Before you buy a new scale, ask the HOWE owner what he thinks about the Ball-Bearing-protected HOWE. Or write for complete information about HOWE Grain Hopper, Grain Dump and Motor Truck Scales, to The Howe Scale Company, Dept. J-1, Minneapolis; Chicago; St. Louis; Kansas City; Cleveland; Cincinnati; San Francisco; or Rutland, Vermont.

an ASSET or a LIABILITY



The HOWE three-unit lever system is one of the strongest of all scale lever systems

HOWE

Scales

HOWE

FAMOUS

FIRST IN

1857

WHERE WILL A "FIREBUG" STRIKE NEXT?

Special Investigators from the Loss Investigation Department of "The Mill Mutuals" employ all the modern methods of scientific crime detection in protecting you against losses caused by incendiaries.

* * * * *

A \$500 Reward Will Be Paid by the Mutual Fire Prevention Bureau for Information Leading to the Arrest and Conviction of Any Person or Persons Burning or Attempting to Burn Any Flour Mill or Grain Elevator Insured in "The Mill Mutuals".

* * * * *

Report Any Evidence of Attempts to Burn or Destroy Such Property to the

MUTUAL FIRE PREVENTION BUREAU

Department of

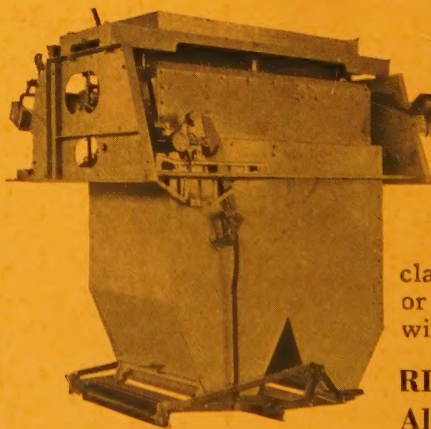
Association of Mill and Elevator Mutual Insurance Companies

230 East Ohio Street

Chicago, Illinois

GRAIN SHIPPERS!

**WATCH YOUR PRICES!
WATCH YOUR WEIGHTS!**



Both are equally important — Don't rely on obsolete, worn-out scales.

Have them put in first-class condition, or replace them with the modern

**RICHARDSON
All - Automatic**

Grain Shipping Scale

ACCURATE and SPEEDY

Richardson Scale Company

Factory: Clifton, N. J.

37 W. Van Buren St., Chicago, Illinois

Minneapolis, Minn.

Wichita, Kansas